A VISIT TO THE SEYCHELLES ISLANDS

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I.

I had long desired to see this interesting group of Islands, and fortune at length favoured my wishes in the shape of an invitation to visit the various Dependencies of Mauritius in H.B.M. Frigate *Forte*. I was requested to be on board punctually by noon on Saturday the 19th August 1871. Duly at that hour I presented myself; bag and baggage, and was received by the Commanding Officer, who informed me that the Flag Lieutenant had given up his berth to me during our cruise. The requisites for our short voyage were soon comfortably stowed away, and all superfluous baggage such as boxes of bottles, &c. and the various appurtenances of a naturalist consigned to the hold for the time; these latter pretty considerable, as it was my intention to collect everything possible during my limited stay connected with the Fauna of Seychelles.

Before all was completed, the shrill whistle of the boatswain was heard and all was bustle and activity to receive H.E. Sir Arthur Gordon who was seen approaching from the shore. Away went the crew of over 500 men, and in a miraculously short time the yards were manned. Rear Admiral Cockburn, who was already on board, stood at the gangway with all his officers in full dress, a file of marines behind them, and all naval etiquette carried out to the letter to receive the Governor. The Barge containing His Excellency, General Smyth[1], Colonel Orme, the Hon. the Colonial Secretary[2], Mr. Gordon, the Governor's A.D.C. and Private Secretary, and the Harbour Master soon came alongside, when a salute of 17 guns was fired. As the distinguished party mounted the deck, the Marines presented arms, the Band struck up "God save the Queen", and in a few minutes the guests were ushered into the Admiral's State room, where a magnificent Tiffin[3] awaited them. The viands were fully discussed, the sparkling vintages of France and Germany circulated freely, and the festive scene lasted for a considerable time. The bows of the Frigate were seaward, and the motion of the Screw began to give warning that it was time for the guests to seek their boats unless they wished to share our voyage. A shake of the hand, kind wishes and good byes were soon exchanged, our friends left, and very soon after the Frigate's berth was vacant. Away we steamed and bid adieu to Port Louis Harbour.

Never were the words "T'is distance lends enchantment to the view" more appropriately used than to Mauritius scenery. Once out of the Harbour, and all that is objectionable in the city fades away, and leaves only the fine outline of the mountain slopes in its back ground, shewing unmistakeably their volcanic origin, and telling their own tale of the time when a fiery gulf was within their circle where the city now peacefully rests. As we receded, the grand ranges of the other parts of the Island came into view, and as the shadows of evening fell gradually on their giant cliffs, the effect was magnificent. I gazed at them in admiration till nearly dark, an admiration none the less deep that I had a pleasant personal acquaintance with them all.

On Sunday the weather proved serene and smiling, and by 8 o'clock all were assembled on the quarter deck for morning prayers, (a custom of strict daily occurrence on board the Frigate.) In the forenoon the gun deck was arranged for Service which was admirably conducted by the Revd. Mr Johnson. Many parts were chanted by the midshipmen, and very creditably too, and one of them played on the Harmonium.

The Church Service on board ship has always a peculiar impressiveness for me, the dash of the waves against the vessel's sides giving it an additional solemnity. At such times it is easy to take the splash of the water as a warning

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[A] This footnote excepted, all footnotes are Pike's, while the endnotes are editorial commentary, mostly identifying species or updating their names, by Anthony Cheke & Justin Gerlach, using personal knowledge and the following reference works; where no scientific name is given it is unchanged from Pike's time; square brackets in the text are also editorial additions:

Bowler, J. 2006. *Wildlife of Seychelles.* Old Basing, Hampshire, UK: WildGuides Ltd. 192pp.

Friedmann, F. 2011. *Flore des Seychelles: Dicotylédones.* Rev. ed. Marseille: IRD Éditions, Collection Faune et Flore tropicales 44. 663pp.

Gerlach, J. 1987. *The land snails of Seychelles – A field guide.* Weedon, Northamptonshire UK: [author]. 43pp.

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Lieske,E. & Myers, R. 1994. *Coral reef fishes: Indo-Pacific & Caribbean.* London: HarperCollins. 400pp.

Newton, E. 1867. On the land birds of the Seychelles archipelago. *Ibis*, new series, 3: 335-360.

Skerrett, A., Bullock, I. & Disley, T. 2001. *Birds of Seychelles*. London: A.& C. Black (Croom Helm). 320pp.

St. John, H. 1961. Revision of the Genus *Pandanus* Stickman, Part 5. *Pandanus* of the Maldive Islands and the Seychelles Islands, Indian Ocean. *Pacific Science* 15: 328-346.

note that should "He blow with His winds" that gentle tone would be changed into the furious roar of the angry billows, and that the mightiest hull ever constructed by human hands would be but as chaff before them. I was delighted with the quiet harmony which seemed to pervade the ship, officers and men all in accord, and must say I never spent a happier Sabbath on shore.

On Monday, drilling and the usual routine of duties employed all on board, so I amused myself by throwing out my surface net from one of the Ports. I had been curiously watching a singular red streak on the ocean stretching as far as the eye could reach, and was very desirous for a closer acquaintance with it, as our course lay right through its midst. As we struck the outer edge of it, the streak was not so perceptible as when at a distance. Upon drawing in my net and placing its contents in a clear glass vessel, I found them partly animal and partly vegetable, the former rigid and sinking to the bottom the latter soft and floating. With a good lens I was enabled to separate them, and the rigid masses appeared to be a species of minute crustacea, probably feeding on the plant. This was a minute Alga, and from its peculiar undulatory motion, I presume it to be one of the marine Oscillatoriæ or near it. It is not improbable that it may prove similar to the one mentioned by Harvey as giving the red colour to the Arabian Gulf. He says: This colour is due to the presence of a microscopic Alga (*Trichodesmium erythroeum*) allied to Oscillatoria, and endowed with similar motive powers which occasionally permeates the surface-strata of the water in such multitudes as to redden the sea for miles. I carefully preserved specimens of both, in diluted alcohol to transmit to America for scientific examination.

On my voyage from America to Mauritius in the *Monocacy* U.S. Frigate, on the subsidence of a cyclone we met after leaving the Cape of Good Hope, I saw the same phenomenon, but the patches of colour were olive brown, and the Algæ were not so minute as those giving the red colour to this part of the Indian Ocean. The whalemen say they often meet with the appearance immediately after a heavy storm. To my surprise I found entangled in the net, one of the curious oceanic insects, belonging to the family of the *Hydromelidoe*[4] I believe. I have caught one about 25 miles from Port Louis and dozens in the harbour. What it feeds on I know not, but it certainly, minute as it is, lives out on the broad ocean, and from its great rarity at certain seasons, and abundance at others, would appear to approach the shore for the purpose of propagation. It is a marvel to see these little dots bobbing about just on the crests of the waves, and when pursued dive down through them. There are two species I have taken at Port Louis, and this resembled one of them, grey with a white abdomen, a black line on the back. Both kinds are diamond shaped, with large prominent eyes, shaggy thighs, very long hind and short fore legs, the antennæ and palpa resembling a spider. The little creature was so active and sprang about with such celerity I had a difficulty in securing him after he got his feet clear of the net. I have watched these insects often very closely, but have never been able to discover what changes they undergo, and I believe nothing is as yet known of their habits by the scientific world.

The sperm whales (*Catodon polycyphas* I believe[5]) are very abundant in this ocean and we several times saw them quite close to the bows of the Frigate, though the vessel's rapidly cleaving the waves seemed to startle them.

On Tuesday about 3 P.M. we sighted Agalega, but it lies so low, it is not observed till near. We ran within two miles of it, hove to, and fired a gun, but saw no signs of houses or people. The sea was breaking roughly over the coral reefs which nearly surround this Island and extend some distance from the shore; so we did not land, which I much regretted, for I wished to obtain some of the wild partridges, guinea fowls and peacocks[6] said to be native there as well as other things of great interest to me.

Agalega is 11 miles long and entirely of coral formation, and has been in fact two islands, the channel between having been so nearly filled in, that at low water it can be crossed on foot. There are a few houses here but we passed to the W. so did not see them, and *filaos*[7] and cocoa-nut trees appear very numerous.

After leaving Agalega, we came to some extensive Banks when soundings were taken front 29 to 35 fathoms. The armature of the lead was, at my request furnished me. On close examination of it after my return to Mauritius, I found it to consist entirely of coral debris and Foraminiferous shells. The latter requiring a high power of the microscope to develop them at all. My instrument only enabled me to see that they were shells, but not strong enough to distinguish them, so I have carefully preserved the whole to send home.

These delicate shells exist in all the warm seas in the world, and those who have never seen them may form some idea of their minute size, when it is stated that "four hundred thousand of them have been found in forty six grains Troy of sand." Yet minute as they are surely and steadily are they filling up the depths of the ocean. The great Atlantic Telegraph plateau is a bank formed of the dead shells of the Foraminifera. The Indian Ocean also swarms with them. I have been informed by the captains of our whalers that on the Saya de Mala bank somewhat to the Eastward, they have found soundings, in five fathoms. Near this is a noted whaling ground, and some of the old sailors who have cruised there many years, tell me the bank is gradually rising, and the day is not far distant when the sea will break over it, and another and dangerous reef be added to the perils of this Ocean. It is supposed these Foraminifera feed on the Infusoria which they have the power of electrifying or paralysing by some hidden electric capacity. Thus, these, "The smallest and most microscopic of animals in existence, are unpitying flesh eaters, and become formidable destroyers by means of a homoeopathic dose of poison.

We constantly saw Frigate birds and others flying to Agalega from the sea to rest for the night, and two species of *Paille-en-queue* or Tropic bird. This evening a Booby alighted on the main boom, and one of the sailors crept cautiously along it and caught it for me[8]. We were steaming and sailing along at the rate of 10 knots, the ship rolling much, and for a change the waves dashed on to the poop deck where we were walking. We retired to the gun deck to chat and smoke but old Neptune tried hard to put our pipes out, by sending his emissaries thundering in through the ports and we all had to be spry to escape a ducking.

Wednesday was showery but I tried my net again and I fished up some of those singular Pterepodous Molluscs, the *Hyalea globulosa* (Rang)[9]. They were in great numbers but darted away with such swiftness that it was with difficulty I succeeded in capturing them. This rapidity, with the quick flap of the butterfly shaped fins (if one can so call them) gives them a peculiar motion in the water, and is a distinguishing mark of' the *Hyalea*. As soon as caught they draw in the flappers, and they require most delicate handling not to crush the fragile bluish brown shells. Some of the genera of these Pteropoda form the principal food of the Right Whale of the northern seas, where they are in such myriads as to colour the water, and wherever they appear the whalemen look out sharply for their monster cetacean prey.

On Thursday our last day on board, the men were drilled with the Schneider rifle, and exercised in fencing, and working the heavy guns. The general physique of the men was fine as any I ever saw, and they handled their guns admirably. I could not help thinking as I watched them, that if all Her Majesty's Men of War are conducted as this is, and all her Officers and men of such moral and physical calibre as those of the *Forte*, she has little indeed to fear from a foreign foe. I can only believe that the writer of the "Battle of Dorking"[10] can know little of the real character of England's hearts of oak, or such a myth would never have originated in his brains.

Towards noon we sighted Mahé and could see most of the group of the Seychelles. Towards 3 p.m. we neared the Island and it appeared like a single mountain, wooded from shore to summit. On a nearer approach after passing St-Ann's and Ile aux Cerfs, the grand outlines of the precipitous Mt. Peaks began to stand out in bold relief from the forests. As we neared the roadstead a pilot put off to us, but we hailed him and declined his services. The above Islands are very picturesque as seen from the ship. Covered with dense foliage the vivid greens of those near the water's edge, contrasted with the sombre olive of the background and presented a brilliant picture, grateful to our eyes even after so short a voyage.

On rounding the Island Port Victoria came into view, and we dropped our anchor in the inner harbour about 5 p. m. In a short time a boat put oft showing the English ensign, and Mr Franklyn the Civil Commissioner, Dr Brookes the Health Officer, and Mr Vaudin the English Minister soon boarded us after the usual inquiries pratique was given, and they returned to the shore, Mr Gordon accompanying them, to make preparations for the official landing on the morrow.

We found in the harbour the French corvette *Surprise* of 4 guns, Captain Thierry, and a small Arabian man of war. Officers from both ships soon made their appearance and apologized for not saluting, as they had not sufficient guns. The American whale ship *Herald* lay astern of us and she soon run up her Stars and Stripes. I was greatly pleased watching the men of the *Forte* heaving the anchor short at the Capstan, all keeping regular time to the lively airs played by the Band, such as "Champagne Charley", "Sally in our alley", "Tom Bowline", and other favourite nautical ditties. In the evening the Admiral gave a dinner on board the *Forte* and several ladies and gentlemen from shore were present.

II.

The morning of Friday the 25th August was bright and clear, and the crystal waters of the Bay of Mahé were smooth as a mirror. The town of Victoria could be distinctly seen from the Frigate, and as I gazed on the grand outlines of mountain and forest on the island, I was already revelling in the anticipation of pleasant hours spent in exploring the one and climbing the other. As it was understood that His Excellency was to land this day, I concluded to go ashore as soon as breakfast was over, in order to note everything there was to be seen, which I accordingly did.

About 8 o'clock a steam barge left the ship with two field pieces and a squad of sailors, and when I landed I saw them hauling the guns along the Chaussée in true military style. I found the town in a perfect ferment of bustle and excitement. Many planters had come in from the country with their families, and others from the neighbouring islands; all were dressed in their Sunday's best, especially the ladies and children, and all looked eager and happy. From an early hour the Chaussée was crowded with people ready to welcome Her Majesty's Representative. Towards noon a State Barge was prepared and as His Excellency left the Frigate, the yards were manned and a salute of 17 guns announced his departure, the echoes reverberating along the old granite hills carrying the news to the very depths of the forest: Every vessel, down to the smallest craft in the harbour displayed bunting in any quantity. Numerous plying boats were filled with spectators eagerly watching the Barge that bore the Mauritius flag for the first time out of Port Louis. At the landing place a group of gentlemen waited to receive His Excellency and offer him the customary official greetings. As the Governor set foot on shore, the above mentioned field pieces at the opposite end of the Chausée thundered out a second salute of 17 guns. The bells of the Churches clanged forth a welcome, taken up by the ready tongues of the assembled multitude, "welcome, welcome to our Governor." He was received by Mr Commissioner Franklin, and I presume with the usual complimentary speech, but I was not near enough to catch it.

His Excellency passed up the Chaussée under an arch of evergreens which had been run up rapidly at the last moment, but in spite of haste it was very tastefully arranged. On each side of the Chaussée stood the boys and girls belonging to the various schools. The Catholics attended by the *Frères* and *Soeurs*, and the Protestant by their Teachers. His Excellency appeared greatly pleased at this and spoke a few words to each School as he passed. It was a very interesting sight, for the children were all neatly dressed and well behaved, and their bright faces showed their enjoyment of their fête.

On arriving at Government House, a number of Planters were in the Avenue leading to it, and H.E. addressed them. He stated the object of his visit, and his wish that all matters might be satisfactorily arranged where redress was needed, and invited them to call on him at Government House, that he might make himself fully acquainted with all

questions relative to the welfare and progress of the Islands, and in answer, a lusty cheer rose from all present. In the avenue was a second triumphal arch with two flag-staffs displaying the English and American Ensigns. At Government House a tiffin was prepared, of which His Excellency and many of the principal Planters partook. As soon as the bustle of the procession hand subsided I began to look about me and inspect the town. Victoria was formerly called 'L'Établissement', but by special permission was named after Her Majesty in 1841. It lies on the S.W. of Mahé on a plateau between the base of the Trois Frères Mountain and the sea. Nearly the whole of the houses are of wood, and few of more than one storey. All the streets are short, narrow and slope to the sea. A profusion of fine flowers and trees flourish here, but I cannot say much for the order and arrangement of the gardens. It has two great advantages over Port Louis. The streams that flow through it to the sea are clean, not the filthy water courses offensive to the eyes and noses of the inhabitants of the city, as well as detrimental to the general health, and thus the harbour of Mahé avoids the pollution so fatal to that of Port Louis. Then again, the Seychellois wisely plant trees in their streets (instead of chopping them down) and I need hardly say how grateful is the shade of a Palm or *Badamier*[11] to the pedestrian, if only for a few moments' rest.

There are two sacred edifices, Catholic and Protestant. The Court House, Post Office and other public buildings have a general *tropical character*, i. e. rather shaky and time worn. They are erecting a new Custom House, which when completed, will be a vast improvement on the old tumble down affair which has hitherto served as *Douane*. Government House stands on a slight elevation and resembles an old fashioned country farm house; but it is embellished with fine trees and there are pretty walks about the grounds. In front is a very fair specimen of the *Coco de mer*[12], but inferior in size and beauty to those of Praslin. The Cemetery struck me as very singular. It was I believe during the occupation of the French the "Jardin du Roi," and was planted with fine spice and other trees, now it does duty for a mightier being. It is on a steep slope near Government House, but the graves are so little protected that after heavy rains, some of them must be entirely laid bare.

Near the Cemetery is the Mausoleum of' the Chevalier Quéau de Quincy, Military Commandant under the French Republic. He was Governor of the Seychelles in 1794 when Commodore Newcome in the *Orpheus* accompanied by other vessels of war, entered the Bay and demanded the surrender of the place, giving De Quincy an hour's time to decide. Finding himself in a pretty considerable fix, he wisely complied with the demand; and the old and distinguished Officer was allowed to capitulate with all the honors of war. It would appear that he soon won the respect of his conqueror. The Commodore not being able to leave men enough to occupy the place, actually proposed to De Quincy to accept the post of Governor under the new Regime, which he did, and kept loyally to his compact. The French however did not give up all claim to the Islands so summarily wrested from them. In 1801 after the attempt to assassinate the First Consul, 71 of the conspirators were banished to Mahé, but with very few exceptions they all perished, no provision being made for them by the French Government. Some descendants of these few are still living. It was only in 1814 that these islands were formally ceded to Britain.

There is a good Hospital just outside the town. It is constructed of sawn blocks of coral procured from the reefs, and strange to say, the usual discoloration by the action of the elements on coral has not yet taken place, the blocks being still as white as snow. The Bay of Mahé is about 4 miles in extent, and capable of containing over 100 vessels. The entrance is however so intricate as to render it almost impossible for a stranger to enter it at night, and even in the day time it requires a good pilot. Mr Franklin has recently laid down a number of Buoys to assist navigation in the tortuous channel. Many little islets dot the Bay and from the *chaussée* can be seen the chain of islands encircling it, except on the N. and forming a natural breakwater. This archipelago consists of 29 islands situated between Lat. 3º 33' to 5º 45' S. and Long. 55° 15' to 50° 10' E. and lie at a distance of over 900 miles from Mauritius. Their authentic history commenced in 1742 when they were discovered by Capt. Picault of the *Elizabeth* who was cruizing in those seas by the order of the Mauritian Governor Labourdonnais. The group was then named after him and the largest called Mahé, but later their appellation was changed to Les Seychelles, after Vicomte Hérault de Seychelles.

These islands must have been known very early, probably to the Phoenicians who were constantly trading up and down the African coast. There is certain evidence of their being known to the Arabs, as in the Ile du Nord Arabic inscriptions have been found cut on the rocks. It is not improbable that the Arabs of the E. coast of Africa made them a refuge in their piratical expeditions. Who knows what horrid tragedies may have been enacted amongst the lovely scenery of this archipelago, equally dark and blood stained with those perpetrated by the Buccaneers of the West. A short time ago, on cutting down a large "Bois Blanc" in the forest at Mahé an arrow head of hard black wood was found embedded in its heart. It must have lain there for ages as the surrounding wood was quite discolored, and the wound was so perfectly closed that the arrow was only discovered on sawing the tree into planks[13]. It is not improbable that the Arabs of the Zanzibar coast would man their boats with slaves from the natives tribes N. of the Lupata Mounts, many of which are skilled in the use of this primitive weapon, which is often used for killing birds.

The second day after my arrival I hired a pirogue and proceeded to make acquaintance with the coral reefs in the Bay, which had about a foot of water on them at the time of my visit, and are never quite exposed they tell me. I found the corals very similar to those at Mauritius. The blocks of *Astræas* and *Porites* are immense, and they are sawn into shape and used for building, being more easily worked than the hard granite of the mountains.

Lying loose on them I found fine heads of live *Meandrinas*, the *Gracilis* and others, their polyps of a lustrous green, and various small *Astroeas* of all shades of green and brown. The beautiful silver grey *Poecillipora elongata* so rare at Mauritius was here abundant and covered with *serpulas*, many of their animals of the brightest scarlet. I found some pieces of a *Poecillopora* near the *elongata* quite new to me, but all dead. The fine rose tinted *P. coespitosa* was

plentiful, its square fairy cups filled with a snow white polyp. There were large pieces of dead *P. verrucosa* so much sought for by the coral vendors for bleaching as the branches are solid as well as elegant, unlike the fragile *Madrepora alcicornis* which breaks at a touch. I saw a great deal of it, but mostly broken. The tips are of delicate blue, and the vendors often colour this and other corals to imitate nature, an imitation that looks as if it had been dipped in a blue bag!

Like loveliest gems lay the pink and lilac tipped *Madrepora alirantanoides*[B], their cups resembling exquisite lace work. Fungi from the size of a crown piece to a platter lay all about, and numbers of other corals some well known and others new to me. Sporting amongst these treasures of Ocean were innumerable fish their scaly sides showing combinations of colour so marvellous that when drawn they appear impossibilities, or would do so had we not daily verifying proof in our fish market. I was surprised at the scarcity of *Echinas* [sea-urchins], star fish etc. but crabs of all sizes and hues were abundant, scrambling and scampering about the rocks, and hiding in the crevices when disturbed with a celerity defying capture. I detached a tube of a large and curious *Tubicolous Annelide*, the elegant arborescent appendages brilliantly tinted with violet, yellow and red. These tentacles which form the respirating apparatus of the animal are drawn in instantaneously at a touch, the quickest case of collapse I know; though how he tucks in the large feathery head and his stiff body into the comparatively small case is a wonder—but once his door is shut by thick fleshy filaments, and so closely, that it is only when death takes place and they relax their hold that the creature slips out of his house. The tentacles were nearly three inches in length over 60 in number and when extended they equalled in beauty any Passion flower that ever grew. The case though rough and unsightly out-side, is lined with a substance as soft and shiny as brown satin. It preserved so well in alcohol that it is now on its way across another ocean with numbers of other curiosities to excite the admiration of scientific men at home.

The reefs appear to be making in rapidly just as they are in Mahébourg Bay. The formation of the actual reef coral, as is well known is of the slowest possible, yet the light surface corals are of rapid growth and the coral debris brought in by every dash of the waves, counts for much in the course of a year. How long a time has elapsed since the foundation of those reefs was laid who can tell? The fellows sawing up the giant blocks little thought of the tiny architects of the ponderous masses. According to the scientific calculations, I should think the first polyp must have begun his work somewhere about the time when man had arrived at a few stages from his original Ascidian state, of Darwinian notoriety.

III.

On Monday the 28th I rose very early in order to enjoy a long walk before the oppressive heat of the day set in. I took the road North of the town, which makes along the shore for a distance of about 5 miles. The fine road was I believe commenced under the administration of the Hon. S. Ward, and is still being carried on by Mr Commissioner Franklin.

After leaving my residence I came to a number of large Turtle pounds on the right of the road, which are in fact inlets from the Bay, and the tide ebbs and flows in them. The flesh of the [Green] Turtle forms the 'Beef' of these Islands, and is in great demand. I paused to watch the capture of some by several stout Mozambiques. One of the fellows who seemed to be quite an expert, having selected a fine large one, cleverly caught it by one of its flippers and managed to turn it on its back, and then dragged it to shore. Some of his comrades at once seized it and soon lifted it to a sort of wooden barrow still on its back. Four of them then shouldered the barrow and carried the turtle off to market to be cut up for sale.

I would here mention that my friend the Hon. S. Ward has kindly given me the use of the copious notes he made on all subjects connected with the Seychelles during the time he was Civil Commissioner there. They are full of valuable information and I willingly avail myself of it. My time there was so limited I am glad to be able to supplement my own observations with *facts* from so able a source.

The Green Turtle (*Chelonia viridis*) and the Hawksbill Turtle (*Caretta imbricata*)[14] both abound in these seas, but from their reckless destruction, their numbers are gradually lessening. The former, of Aldermanic repute, grows to a great size, but its shell, with the exception of the centre plate called "*Caouane*" is worthless. This is used for common veneering, and it takes 3 turtles to give a pound of it, yet, every year large numbers are sacrificed to procure it. In 1862, 600 pounds of "Caouane" were exported for which 1800 turtles must have been destroyed, giving an average of 490,000 lbs. of weight good eatable flesh wasted and left to rot on the beach.

The valuable Tortoise shell of commerce is procured from the Hawksbill. Some are speared as they lie floating on the water, with an instrument like a sharp spike nail attached to a long stick. When struck with this spear the air rushes in under the carapace and prevents the animal from sinking, thus facilitating its capture. Others are caught when they come on shore to lay their eggs, as they only require to be turned on their backs to secure them. They come on shore at night and dig a hole 3 or 4 feet deep in the sand with their flippers, and therein deposit their eggs, afterwards so carefully covering them that it is only an expert can find them. Before I left Mahé, I saw one of my country men unearth a nest which had over a hundred eggs in, and he took them and buried them near his house in an enclosure that he might get them when hatched, at which period the turtle is considered a great delicacy. When they leave the eggs, they have only a soft shell and many perish from the attacks of birds as they seek the sea, which instinct teaches them to do, as soon as hatched. There they meet a still more formidable foe in the numerous sharks, but with all this they propagate very rapidly. When a full grown turtle is attacked by a shark, it defends itself by turning its flippers over the back, thus

[B] I use the word *Corals* in the ordinary acceptation to save a repetition of scientific words; of course it is well known Madrepores and others are not true Corals.

leaving nothing to lay hold of, but if speared and trying to escape, the flippers are instantly nipped oft by the savage brute.

After killing the turtles, the upper part of the carapace is taken off; a hole is dug in the sand and a fire made in it, over which is placed the hollow carapace, and this is completely covered with wet sea weed; when the steam soon separates the laminae, or outer plates, the only part used for commerce. The turtles of the Atlantic feed in a great measure on the *Zostera marina* or Marine grass, but I saw none of it here, though so abundant in Mauritius. Their food appears to be principally a species of *Sargassum* which is in great abundance.

After passing the Hospital I came to a fine bridge constructed in Mr. Wards' time. It spans a deep ravine and I passed to admire the rich vegetation clothing the banks of the crystal stream that was quietly finding its way to the sea. There were clumps of the feathery Bamboo over 40.feet in height, that at once stamp the character and give such elegance to Tropical scenery, they bent gracefully over the profusion of ferns, flowers, and grasses, whispering, who knows what of Nature's secrets, in their soft creaking tones, to the lesser, yet still lovely denizens of the wilds at their feet. Beautiful green lizards[15] were playing hide and seek on the Bamboos, or patiently waiting for the unwary insects that should venture within reach. I wished for my camera to be able to carry away some tangible souvenir of the scene, but "There were forms so various, that no powers of art, The pencil or the pen, may trace the scene!"

I met many Mozambique men and women, sauntering along the road, most of them going to work in the town. One of them had a curious musical instrument on which he was playing. It was called a fiddle, but certainly did not resemble one, nor was a bow used on it. It consisted of a straight piece of wood, with 3 or 4 niches cut in one end, which served the same purpose as the frets of a guitar. Half a large gourd was affixed to it as a sounding board, and the hollow side is held against the breast when played. Two Banana fibre strings were fastened at one end and then tight drawn and secured on the niches. They were struck with the fingers of the right hand, and the thumb of the left assisted. The music was plaintive, but not unpleasant although in a minor key. These people all looked very happy and contented and were not apparently in any hurry to get to their work however industrious they may be when at it, though that I take to be very doubtful.

Some distance further I came to another brook and bridge, and passed under instead of over the latter in search of curios. I there for the first time saw those singular animals called the "Jumping fish," *Periopthalum koelreuteri*[16]. I at first took them to be Lizards, for they live as much out of the water as in it, taking life easily by sunning themselves on the roots of old trees or on stones. They are very quick, and when frightened dart into the water skimming its surface more like a bird than a fish, I was a long while before I succeeded in catching one and though his fins are bright yellow and grey, his coat is homely and the two eyes close together at the top of the head give him an evil look. The large pectoral fins have at their base strong muscles, and can be lowered and by help of them and the ventrals, the fish can move rapidly when out of the water in humid places. Its prey is said to be terrestrial insects which it leaves the water to hunt, and it is found both in rivers and on the sea beach.

I have seen stone broken in many parts of the world, but here I found quite a novel method at least to me. I came upon a large fire of coco fibres, and asked what such an amount of good fuel was being wasted for. I was answered that it was to crack the granite rocks, that are so hard that ordinary drills will not pierce the great boulders, so recourse is had to heat to split them. The sun was now just rising from his watery bed, the sky cloudless:

"The eastern gate, all fiery red,
Opening on Neptune with fair blessed beams,
Turns into yellow gold, his salt-green streams."

I wandered up a narrow path through the bushes towards the high lands with a view to gain the top of the mountain. I soon entered a large grove of Cashew trees (*Anacardium occidentale*) then laden with fruit and in many places it was strewed all over the ground. I noticed that the natives who saw me eat them shook their heads, and they told me they were not good to eat, but the cashew being an old acquaintance of mine I did not heed them. It was astonishing to me that this beautiful tree should be so neglected. It is in many respects a valuable one and grows luxuriantly in most all land below 1000 ft. When in Fernambuco some years since I attended an Exhibition and saw a quantity of wine made from the Cashew, and the Governor informed me, that in the following year it was expected that enough would be made to export to Europe and America, and he hoped soon it would form an important item in the products of the country. It was well flavoured, far nicer than most of the Australian wine, I have tasted. The nut is good for desert, and capital when roasted. It is said also that they make a delicious pickle, only to be known to be appreciated, and the wood is useful for furniture. I have seen a fine side board made from it, so it would prove as serviceable as a cocoanut tree if cultivated and looked after. Many acres waste land could be easily planted with it, as everything grows so luxuriantly in this Island. The soil is composed of degraded granite and vegetable mould and in the flatland near the sea is in most parts very rich. A little patch of creole rice was growing where I stopped to rest, and I was told it yielded largely and was very profitable, and to judge from appearance it was as fine as any I ever saw. Why all the various articles of culture which have been proved such a success here are now so neglected is a marvel. From cotton alone large fortune are said to have been made I was informed one proprietor having remitted to France £ 70,000 all drawn from his cotton plantations, (put it down at francs and I should think it nearer the mark.) Any way cotton of most superior growth thrives here equal to the best sea Island, in silkiness and length of fibre. The peculiar soil and climate are admirably suited to it. How much might not such a country produce! but from the present state of things it appears that little trouble is taken to make the most of the goods so lavishly provided. The indomitable *laissez-aller* of tropical climates evidently prevails here.

As I proceeded up the mountain, I came to some clumps of Jamrosas[17] and wild Guavas. The shade was grateful for the heat was very great. I had long known that the Jamrosa is the favorite food of the Leaf fly (*Phyllium Siccifolium*)[18], and its branches their especial habitat, so soon commenced a vigorous search for them. The peculiar dress nature has bestowed on them, enables them well to elude the pursuit of the uninitiated. In form they imitate various leaves, and the veining of the wings keeps up the resemblance, and at different stages the shade of green changes. Some grow to over three inches in length, and all have curious leaf like expansions on the legs. They hide on the under side of leaves, and it was sometime before I succeeded in finding any. When disturbed, they have a peculiar way of doubling themselves up, so that the illusion continues for they are then like little crumpled up leaflets. The eggs resemble a brown seed Carambole form, and are very numerous. Those I found were under a loose piece of bark in the crevice of a Jamrosa. Crawling on this tree I saw insects of all ages and sizes, some only a quarter of an inch long. I brought some away with me as they bear confinement well, and eat voraciously, but many came to an untimely end as their enemy, the small red ant, found them out, and made a meal of them. On some of the trees I saw the nests of a *Caria* or Termite, similar to those in Mauritius but the ants are, I believe, different. They are black and very active and bite like the mischief[19].

There were also those curious slowgoers, yet marvellously wide-awake little animals the Chameleons[20], but not amongst the dead leaves as I found them in the Cape, but crawling up the grasses and bushes. This I am told, is not its favourite haunt, but on the Bamboos, where it is more active and at home than elsewhere. They are very tame and will pursue their prey in a window just as well as in the bush. The eye is on the ball and socket principle, and the creature has the power of turning one completely round while the other is stationary. This power is of the greatest use to it in catching its prey. When lying apparently asleep, from its utter quietude of manner, if closely examined, one eye will be found turned a little behind the other, and the small pupils scanning every point before and behind. Should any fly or other insect come within its range of vision, it quietly collects itself into marching order, but so stealthily the movement is almost imperceptible, and when within what it conceives to be an accurate range, out shoots the long tongue, and it is not often it misses. If it does, it at once drops into quiescence and waits patiently its next chance. The Chameleon is very harmless, but can be excited to anger by rubbing on the back when it will open its mouth, a great yellow cavern, and puff itself out with a hissing sound, but I never saw it attempt to bite. It changes its colours according to the substance it is on, and when angry becomes very dark. At night it is perfectly white, and it then curls itself up and sleeps till the first streak of light wakes it to hunt for prey. Its foot consists of two prehensile toes without any claws, and its movement is peculiar as it often makes several attempts before it puts the foot down, a precautionary measure to secure a firm foothold I presume.

After considerable mounting I came to a sort of plateau where was a clean looking hut, and behind is rose a giant granite cliff showing a straight inaccessible face, utterly precluding my further progress. I saw a woman and some children, and a little boy brought me out a bench and placed it under a bread fruit tree; my hot and wearied look I suppose touching the woman's kindly nature, and I was but too glad of a rest. She made me understand her husband was a fisherman and that even then he was on his way home up the mountain. He very soon put in an appearance, and when he saw me he welcomed me in English, as he told me he had served in an American whaler. He at once offered to get me some coconuts, and his wife busied herself to prepare me some bread fruit she had been roasting in ashes for her husband, very good I found it the first time I had tasted this delicious fruit cooked in this manner, and the coconut milk was most refreshing after my climb. My visit seemed to make quite a small excitement. The man now told me his history, a simple one enough, his father was a Mozambique slave, and he himself had tried all sorts of employments, but having made some money whaling, he had settled down on this mountain, and cultivated a little patch of ground. Some *patates*[21], rice, etc., forming nearly all his wealth, with some fowls that lived mostly by their wits and scraped a livelihood In the bushes. He told me that formerly he had planted tobacco and made some profit by it, but now it was so heavily taxed he was obliged to abandon it. He might have done it on the sly, but he said his priest who was a good man, told him not to do so, not to break the laws, so he obeyed, but found it very hard. He eked out a living by fishing, and thus helped the daily larder. I filled my pipe with some capital tobacco grown in the island, and as it is very possible by far the greater number of those who use the "weed" in Mauritius know nothing of its culture, I will give a slight summary of it.

As soon as the plant shows flower every bud and small shoot on the base of the stern must be picked off each plant, and this every 24 hours. By doing so the leaves acquire great breadth and all the vigour of the plant. When fit to cut, which is proved by the thick, spotty appearance of the leaf and a gummy secretion on it of a brown colour, it is taken off about three inches from the ground, and laid in the sun for about a quarter of an hour, and then hung up to await its final preparation of having the veins of the leaves extracted. All injured ones are laid aside, and the good are rolled up tightly into "carottes" and bound together by being placed in a portion of the heart leaves of a palm, and tied up very carefully with plaited aloe fibre. If this ligature is always tight the tobacco will preserve a very long time, but if it becomes loose and is exposed to the air it soon moulds. It appears to me a great pity the Government has thought proper to put such a heavy tax on the cultivation of tobacco, as it deters the small landed proprietors from a more profitable culture than canes for them, both here and in Mauritius.

The man showed me a musical instrument called, as well as I could make out, a "Bobre." It is just the form of a bow and about its size. The string is played with the back of the fingers of the left hand, and struck with the right by a little stick about a foot long, on which is tied at the end a bundle of small pebbles that rattle as it touches the string. He played some merry tune on it and all the children danced to it, even the mother figuring in at times. I saw many of the

pretty little white sea birds *Sterna Alba*[22] hovering over head, and they told me their nests and those of the *Paille-en-queue*[23] were so well known, that one little fellow started off and brought me presently what I should have taken for a lady's large powder puff, but from old acquaintance, I knew better. The tropic birds (*Phaeton candida*) only lay a solitary egg, and for some time after it is hatched it is like nothing but a ball of down, I must not forget it has a beak in it, for the little savage-can nip sharply, and not all backward to do it, and screeches horridly when disturbed. As it was precisely the same as those I have had so many of in Port Louis I sent it back to the parent bird, who doubtless bewailing its loss. A nice time she must have of it, when *Pater familias* has flown away to fetch food from the sea, for when hungry it screams till its hunger is appeased, and until it is satisfied and the mother, Papa must wait, and even go supperless if he has brought short allowance. Their principal food is a kind of *Sepia* or *Ourite* called *Loligo*[24], which is abundant in these seas.

When I was thoroughly rested, and rose to go, the man offered to show me a short cut down the mountain. Wild pineapples were growing up to the path, with a bright red flower, but none of the fruit was ripe. We met a man with a covered basket, and when he saw me he took off the leaves and presented me with a handful of fine cashew nuts, and I found them so good I bought his basket full which he carried for me down to my quarters, and relieved me of some of my load of ferns and boxes and bottles, for I had secured a good collection of insects on the way. It was nearly noon when I got back, the heat quite oppressive, but it did not prevent my enjoying a very hearty breakfast, and I spent the rest of the day in arranging all my treasures.

V

I received a special invitation to visit Recife and Frigate islands in the French Corvette *Surrprise*, capt. Thierry, (mentioned in a former letter). I went down to the pier early morning and being ahead of the party took the opportunity of examining this really fine construction. I met Mr Chalmers, the Superintendent of part of the work, and he promised me some written details of it, a promise he fulfilled later. Never was anything in Seychelles erected with such celerity and not alone with speed but well done into the bargain. Here is positive proof that the Seychellois can work well, and let us hope that this may be the beginning of improvements essential to the interests of the place. When this pier is built it is expected that goods may be landed or shipped with facility, whatever be the state of the tide, a matter hitherto difficult and oft times impossible The pier was commenced during the administration of Mr Ward, but only 100 feet were completed, circumstances preventing its continuation. In March 1870, it was recommenced and on the 21st September 1871 it was advanced to 1750 feet, It has been entirely done under the personal superintendance of Mr Commissioner Franklin.

The mountains and the ocean have contributed to this admirable sea wall. The former has supplied its everlasting granite for the side walls, which are about 8½ feet high; the latter has rendered up its mysteriously wrought corals to fill to the centre, thus aiding man in forming a barrier, firm enough to withstand the attacks of its boisterous waves. The breadth of the pier is about 20 feet, and it is intended to carry it on to a length of 3,600 feet.

On the 28th August 1871 a tramway was begun and by the 21st September, 1,600 feet were completed and trucks working on it. There is a crane at the upper end to lift goods from the trucks to the new Custom-House, and it is proposed to erect a second at the point of the pier, to lift cargo from ships or lighters into the trucks. The Tramway, Trucks and Crane were sent from the Mauritius Railway, and up to this period have cost about £500. The whole of this part of the work has been superintended by Mr Chalmers who went from Mauritius for that purpose, and infinite credit it does him.

By the time I had well inspected the place all were assembled and soon on board. The Corvette had her steam up ready to start, and quickly slipped her cable from the Buoy and threaded the intricate channel. It was a glorious morning overhead, but with such a heavy swell on the sea that made walking on deck anything but comfortable for a landsman, to say nothing of the tribute exacted by Neptune from some of the party. This latter, I was happily exempt from, and could enjoy the exhilarating scene. Words fail me to give any adequate idea of the loveliness of the view of these islands from the sea; wherever one gazed the eye took in such exquisite picture as will remain for life impressed on my mind, vividly to be recalled whenever I think of the Seychelles. Whole schools of Albacore[25] followed the ship, cutting rapidly through the waves and sheaving their fins out of water. The Executive Officer threw out a line, and in a few minutes the bait was greedily caught, and soon a fine fellow lay on the deck. He was done justice to by the cook for breakfast at a later hour. When we had steamed out about three quarters of an hour the whole group of Islands came into view. Not long after we came to Ile Recife and held up steam to leeward of it. It is only at certain times boats can land at this little island, but we determined to try if we might be of the favoured ones. A whale boat was lowered with 8 men in her, and with two of the midshipmen from the *Forte* and myself we set off to make an attempt to land. We got close to the breakers, when a person on shore signalled to us to go back as it was impossible a boat could live in the sea then running, and very reluctantly we returned to the ship, which was not done without some trouble on account of the strong current, and the waves curling all round us.

This island is leased to a person from Mauritius who reaps a profit from the eggs collected there and sold at Mahé. It is astonishing to see the immense numbers of black birds hovering over it, the *Anous stolidus*[26]. It resembled a rookery on a large scale and the birds appear to be as resentful of intrusion on their domain as rooks are, for they say, no other birds are found here. The smell of the guano was very disagreeable, and the proprietor told me he intended to begin to collect it for exportation. The manner of procuring fresh eggs is curious. A patch on the sand is cleared from stones, and old eggs, and on the following morning it is found covered with new laid ones, as these birds build no nest.

We could see over the Island which is destitute of vegetation, mere barred [*sic*] granite rocks, with here and there patches of soil from their degradation, and some spots of sand on the shore. There are two small huts on it for the guardians. We steamed from Reciffe to Frigate Island, which is about 50 miles from Mahé. We saw great numbers of that species of Porpoise called by whalemen the cow-fish[27]. They are of an olive brown with a white stripe from head to tail, and as they followed the ship constantly leaped out of the water often many feet in an oblique direction, but as we were steaming and sailing fast, we soon left them behind. Large turtles lay apparently asleep floating on the waves, for our passing did not seem at all to disturb them. When about 3 miles from Frigate Island there is a strong current, and one single rock just shows above the waters, which break madly round it. At a short distance from it are soundings over 50 fathoms, so that very probably it is the top of some submerged mountain of a former continent.

We ran in round this rock and fired a gun. We could plainly see the houses on shore and people moving about, and a flag staff with the English ensign but no one came off, and after waiting some time, the midshipmen volunteered to go on shore in the whale boat. In rounding the island we lost sight of them, and supposed they intended landing on the other side which is very high, and we expected to see them, but as a good time elapsed and no appearance of them, some fears were entertained for their safety. After waiting till 3 p.m., we fired another gun, when in a few minutes we saw a very large whale boat approaching, and it proved to contain M. Savy the proprietor of the place, come to invite the party on shore, to visit his house, an offer willingly accepted, and we landed on a bold shore, the waves breaking directly on the rocks near us. Our landing was effected by anchoring the boat in the surf about 50 feet from shore, when two men paid out the cable till her stern was near enough the rock, that we could leap out. We had to climb up the side of the only mountain there, about 280 feet high through a few stunted trees, passed over the top where the bare rock shews in many places and in others patches of coarse grass, and descended the opposite side to the low land where Mr Savy's house stands, shaded by magnificent Banian and other trees. This gentleman was exceedingly polite and hospitable and after offering refreshments proceeded to do the honors of his Island home.

He has a Distillery for Rum made from sugar-canes, a plantation of which looked well. His vegetable garden was flourishing and we were all astonished at the monster cabbages growing there. A number of Madagascar cattle were grazing about the place, and he told us he made considerable oil from the cocoa-nut trees which were most prolific, and employed about 40 men in all. It appears to me a great pity that some enterprizing men does not introduce into these islands proper machines for thoroughly expressing the oil from the "coperee" [copra] or kernel of the cocoa-nut. It is an item of great financial importance, as a fair price is given, and a ready sale always found for it in Mauritius. I find that in 1862 about £10,000 worth was exported and with proper appliances that amount might according to good authority, be easily doubled. The means now adopted are only those employed from time immemorial, in India, Ceylon, &c.. namely, the old wooden mill on the pestle and mortar principle worked by an ox. By this miserably clumsy appliance nearly half the oil is lost. It takes one cwt. of "coperee" to make 4 velts (40 wine bottles) of oil, with proper mills and suitable presses, at least 7 velts might be obtained from the same amount. The cocoa nut tree is certainly the greatest boon ever bestowed on a tropical climate, from its numerous uses, and as I have observed before, it should be planted wherever one will grow, and not only here but in Mauritius also. Why the culture of so useful a tree, not to speak of its beauty should be utterly neglected in Mauritius I know not. It is one of those enigmas yet to be solved.

To go back to Frigate island, after seeing a good deal of the place, I soon began hunting about the bushes, but I was warned by Mr Savy to beware of the scorpions and spiders, especially a large species of the latter, which is abundant, and its bite venomous. He told me that when the men went to work in the fields they took a small phial of concentrated ammonia with them, as these spiders attack them by springing on them as the *Epeiras* do on their prey. Sometimes the bite when not promptly attended to will cause death or long illness, but even when dressed at once with ammonia, the victim is laid up for 8 or 10 days. The poison induces vomiting, cramps, and swelling of the whole body. This same spider is also at Mahé and I saw an American on Mr Sedgewick's Estate who was bitten by a spider while asleep, and he had been in bed for some weeks. It did not however appear to me as common there as at Frigate Island. I found them amongst husks of cocoanuts and dry leaves, and succeeded in bottling a number. It was with the greatest difficulty I could get the Mozambiques to come near me when they saw I had caught some. In brushing over some dead leaves for a *Scincus* new to me, a spider jumped out at them, and they ran for dear life as if a tiger was after them; no inducement could make them help me put them in the bottle of alcohol.

This spider belongs to the genus *Phrynus*[28], and resembles the *P. reniforme* Fab. but if the drawings I have seen of the latter are correct, then these I procured are of a different species or a very strongly marked variety for there are notable differences in the palpi and legs. This genus is easily known by the excessive tenuity of the multi-articulate fore legs, which apparently serve the purposes of antennae rather than of locomotion. Like all the Pedipalpi, the maxillary palpi resemble legs, are very stout and long, and terminate in a formidable group of claws. The mandibles are very short and sharp; and the legs have a double serration on the outer side to the second articulation where is a sharp spine, and they terminate in a double claw. Armed thus at all points, and carnivorous, they must be most terrible enemies to the insects they feed on. I have some females 14 lines long, but the males rarely exceed nine. The fore legs of the former measure over 5 inches. The latter have brown and yellow stripe on the legs whilst the female is of a uniform dark brown except the palpi that are nearly black. This genus exists I believe only in Seychelles, Brazil and Lower California.

I captured several scorpions from 8 to 9 inches long, but the men did not seem afraid of them as they were of the spiders. One small one not more than an inch and a half long of a different species seems to be the only one dreaded, the bite of it causing violent inflammation[29]. I was only able to procure one specimen of it. Several snakes were brought

to me alive, said to be harmless. Some of a bright yellow and olive colour, others ash colour with dirty white spots, and they were said to be different species, but on examining them before and after death, I concluded them to be only varieties of the same species, the differences caused probably by various food and ages[30]. They call them harmless, simply because they don't attempt to bite unless attacked, but if they do bite, it is never without danger more or less.

On almost all the coco nut trees is found a large Gecko of a yellowish brown colour, somewhat repulsive looking[31]. Strange to say it is only found on this island and at Curieuse. I now first saw the beautiful bird the *Pie Chanteuse, Copsychus Sechellarum*[32] first brought to the notice of the scientific world by the Hon. E. Newton and his brother. I should have liked to procure a specimen but the proprietor was unwilling to have one shot as this, as well as other indigenous birds in the various islands will soon be but memories of the past, as are the Dodo, Solitaire, &c., from their constant destruction by cats and rats, both of which are in formidable numbers in most of the islands. A nest with a young one was brought to us, but one of the party requested it might be at once replaced, which was immediately done. This nest was roughly and loosely made of dried blades of coarse grass outside, but the interior was of very fine grass neatly interwoven, interspersed with tufts of wild cotton. It was about 4 inches in diameter within. The young bird had still its pin feathers and was very fat. The plumage of the full grown birds is nearly black with a brillant gleam of blue when in the sun, except a white patch on the upper wing coverts. I quote a few notes on this bird from Mr Newton's "Land birds of the Seychelles Archipelago" as he studied it particularly whilst there. He describes them as bold and familiar, even entering the houses. Their food appears to be millepedes, beetles, lizards, &c. They have a jerking motion of the tail and sit with the wings drooping and tail erect. The bird has a pleasant succession of low soft notes heard chiefly morning and evening. The young if taken from the nest are rarely if ever reared. A good drawing of this bird may be seen in the *Ibis* for August 1865.

When hunting for shells on the shore a coloured man evidently a labourer, came up and asked me the names of some species he had in his hands and of which he told me about their animals. I at once gave him them as they were familiar to me. One of our party laughed at the idea of such a man wanting to know anything of conchology. Now it struck me as anything but laughable, this pursuit of knowledge under difficulties. I could not help comparing this humble aspirant for information, who had well studied the animals and their habits, with the numerous shell collectors in Mauritius and elsewhere, who load their memory with long scientific names, and know nothing of the habits, habitat or forms of the architects of the shells.

Frigate Island has but sparse vegetation, no large timber trees, only here and there clumps of bushes. It is entirely of granite, and I think of more recent date than Curieuse, which I visited later. The granite of the mountain is less degraded, and has fewer fissures, and there is a scarcity of the detached boulders on the lower parts of the island, compared with those I saw elsewhere. The reef near Mr. Savy's house makes off to some distance, and I was astonished to find it consisted in a great measure of the Scarlet *Tubipora Musica*, so brilliant when in the water but that grows dull directly it is dry. I have however seen some pieces from St. Brandon preserve their colour many months. The colour instead of being a bright scarlet is orange, so it is possible it may be another species of the Tubiporae, it being now decided by zoologists that there are others besides the *musica*, distinguishable by the colour of the polyps. These animals appear to have been more closely studied than any other of the corallines. "The Tubiporæ live in societies but do not appear to be united, as the compound polyps. A group presents several stages of tubes, one above the other, but appear slightly to diverge as radiating from a common centre; they are separated by intervals and support each other by horizontal laminæ. From each tube issues a membranous animal of a grass-green colour, the mouth being surrounded by 9 tentacles, furnished along their edges with rows of minute fleshy papillae."

I found some interesting Algae the same as those at Mauritius, but very large. The *Laurencia papillosa*, *Padina pavonia* and *Hydroclathrus cancellatus*. The fronds of the *Gracilaria crassa* so small in Mauritius were very large, and it lay in masses on the shore. The lovely *Plocamium cornuta* that I have taken at Flacq and Flat Island, was also abundant of the most brilliant scarlet. To my surprise I found a plant dead on the beach I have looked in vain for at Mauritius, the *Bryopsis plumosa*. This elegant little plant is found the world over from the cold north in the Faroe Islands through the tropics southward, to Cape Horn and New Zealand. Between the shore and the reefs grows the *Caulerpa denticulata* but I did not see any of the long fronds of the *C. Scalpelli formis* so abundant in Port Louis Harbour. In the Pacific archipelagoes several species of *Caulerpa* are eaten, and the green fat of the Turtle is said to be owing to the semi-gelatinous, bright green endochrome containing starch grains mixed with oily particles, that fills the fronds of all Caulerpas. I picked up a branch of *Turbinaria*, but it appeared much coarser than the *ornata* at Mauritius. The cup like tips of the fronds were filled with the pretty little coralline parasite, *Jania antenina* its pink colour having the effect of a flower, it was in such masses that it was very difficult to know which was the original plant. This however was not the only parasite that had adopted the Turbinaria as a home. I was waiting for the rest to return to the boat and sat down under a cocoanut tree to examine the plant with my glass. Some of the fronds were covered which appeared to be a disease, to the naked eye, but on close inspection, proved to be minute *Lepralia* or *sea scurf* as it has been called, a sort of congeries of egg-shaped cells of calcareous matter, but as the Turbinaria had been long out of water of course I did not see the polyps. Under it on the rock lay a delicate *Hydatina physis*[33], with its animal still alive. It is worth a walk to the sea shore to see this beautiful creature, and if any one in Mauritius possesses an Aquarium I would recommend the owner to procure one as soon as possible, as it bears confinement well. The colours are a lovely buff and sky blue, and when it outspreads its diaphanous mantle as it will do on the hand, it is a most interesting object. Bits of *Flustras* lay about, shewing how rich in Marine plants these seas are, and I wished I had a longer time to remain,

to examine the reefs and shore. One bit, I snatched up in haste and pocketed, prove to be on examination a pretty *Sertularia* growing on a *Flustra Foliacea*.

The Corvette was lying off and on about three quarters of a mile away, not daring to approach nearer, but the whale boat that brought us to shore was tossing up and down like an egg shell, not at all to the inconvenience of the men who lay half asleep in her. As we embarked, a wave broke over the boat and gave us a thorough wetting. Mr Savy accompanied us to the Corvette bringing with him a fine basket of vegetables. We then took leave of the hospitable owner of Frigate Island and steamed back again towards Mahé. A passing shower that fell at some distance from us, revealed a new beauty which added a wonderful charm to the already attractive scene. A double rainbow was formed and seemed to bridge the distance between two of the islands.

"Gaze on that arch of coloured light,
And read God's mercy there.
It tells us that the mighty deep,
Fast by the eternal chained,
No more o'er earth's domain shall sweep.
Awful and unrestrained."

I cannot speak too highly of Capt. Thierry for his politeness and attention to his guests. I must not forget the sparkling champagne which he dispensed so liberally that was grown on his father's estate in France. The last probably for years he would have from the vineyards so laid waste during the late war's desolation and destruction. We did not arrive at Mahé till long after dark, but greatly gratified with our trip, for which Capt. Thierry had our best thanks.

VI.

The Mail Steamer of the Messageries Maritimes called at Mahé on its return from Bourbon and Mauritius. This time it brought Mr Horne, Sub-Director of the Botanical Gardens of Mauritius. As soon as he arrived I at once set on foot plans for making a botanical and zoological examination of the Island.

On Saturday the 2nd Sept. we were up at day light and off to the mountains. We took the range to the N.W. of the town, and began our ascent through a small cultivated plot of ground owned by a German. Melons, Tomatoes, Cucumbers, Batates, Carrots and other vegetables, Manioc, Tobacco and mountain Rice all looked healthy and promising, owing doubtless to their evidently careful cultivation. The proprietor, an old man was watering his plants and appeared both active and intelligent. He replied to our questions promptly, anything would grow in Seychelles and yield a rich harvest if people would only attend to their work. But no, he said "my neighbours will come here and talk for hours, looking at me working and admiring my vegetables, if they would only work as I do they would soon have as great an abundance as I have." I was much amused with the old fellow's quaint remarks and his evident pride in his garden. He is quite right as to the general indolence, judging from the usually neglected appearance of the grounds round the various huts I have seen. Like all places where the ground is naturally so prolific, there, least care is ever taken to make the most of land. Just enough is grown to supply the family, or to have a few baskets to exchange at Bazar for Fish or Rum, but no trouble is taken for further profit; although a ready sale could be found for their produce. The principal bread used by a large portion of the inhabitants is a sort of flat cake made from manioc flour. This plant only requires a stalk placed in a hole in the ground, and when left to itself will flourish and give a tuberous root that when grated and washed supplies the farina so dear to the tastes of the Seychellois. We passed along the foot of the mountain wending our way along a path between enormous blue granite boulders, certainly the largest I have seen in any part of the world. Some hundreds of thousands of tons in weight, luckily sufficiently apart to enable us to thread our way through them. A mass of vegetation has sprung up between them, and in many places giant Palms overshadow them, shewing how long they must have lain there since the time they were dislodged from their mountain bed and toppled over. In some places the people had taken advantage of the squares sides of the boulders making them serve as one end for their houses, certes, they were safe on that side from hurricanes or thieves!

I noticed at intervals, cocoa-nuts and the Bread fruit and Jack trees. The Bread fruit grows all over Mahé most luxuriantly. Doubtless the size and beauty of these trees is owing to the freedom of the island from hurricanes. The wood is excessively brittle and the handsome leaves snap off easily, so that it requires shelter from heavy winds. The fruit appears quite free from the species of coccus that infects it in Mauritius. Whilst making a visit to the gentlemanly and intelligent Magistrate Mr Esnouf; he called my attention to a Bread fruit tree near his country villa over 50 feet high, loaded with hundred of fruits many ripe for gathering, and the branches spreading wide and forming a magnificent canopy.

We passed up the first spur of the mountain and then halted near a neatly built cottage under the shade of some coconut trees, to wait for the surgeon of the *Forte* to join us. The construction of this dwelling was ingenious. The frame made of small poles cut from native trees pegged together, closed in outside with plank 2½ inches wide and an inch thick, sawed from the coco nut trees, and the bark stripped off. It was thatched strongly with long grass laid very neatly inside. The owner told us he got 50 strips of wood from one tree, and said it would last many years being very durable. We had not long to wait for our friend, and as soon as he joined us we proceeded on up the mountain. On the dead trees we passed was an abundance of what looked like a scarlet blossom, but that proved to be the brilliant Judas ear fungus (*Eridia auricula Judoe*), in colour and texture when fresh like rich velvet. My comrades both botanists were all eyes for the wealth of vegetation we encountered at every step. I wandered on a little ahead of them till I came to a valley between 2 spurs of the mountain, enlivened by a clear streamlet tumbling amongst the boulders. I was soon

occupied in catching a snake and some Geckos which were very numerous on the Bananas and coconut trees. Looking round me I was attracted by a tree in the distance which called forth such admiration I shouted to my comrades and we all went up to it. A *rara avis* it proved to be;—a double headed palm of the genus *Hyphoena* specie unknown about 40 feet high, as straight as an arrow, larger and more robust than ordinary palms; with a rough spiny back, of equal size from the column upwards. The leaves were very dark and long the two crowns dividing at top, and the leaven drooping with inexplicable grace all round. The fruit appeared long and large, hanging in clusters but so far out of reach. Mr Horne was unable to procure any, but he secured some portion of the leaves, &c. Near this was a Marroon Bread fruit tree, which resembles true one in the outside appearance of the fruit, but inside the kernels are larger than those of the Jack; but the foliage is scraggy and the leaves not so deeply cleft[34]. Mr Horne procured many of these kernels. When roasted they are not unlike a chestnut. I know their taste from experience, as in one of my trips up the mountain I was invited to a breakfast, and these kernels boiled and eaten with salt and manioc cakes, proved to be the collation for a man and his wife, a child and myself.

Just above this we found some beautiful ferns, a store of which we secured. I caught several of the pretty *Euchelia formosa*[35] moths, the crimson spots contrasting beautifully with the pure white and jet black of the wings. They were hovering over the long grasses at the sides of the path. The *Cyllo Leda*[36] were very abundant, resembling those so common in Mauritius. One specimen is however very curious, instead of the hind wings being simply rounded and scollopped as in the ordinary type, the median line is elongated giving it more the look of a *Papilio* than a *Cyllo Leda*. I found just as great a variety in the colouring of the under sides of the wings as in Mauritius, the markings ranging through all the shades of greys and browns to pale buff. The *Euploea euphone*[37] was also very common, but small.

Our Mozambiques had my double barrel gun and Monte Christo rifle lent me by my friend Mr Durup, and I shot a fine pair of *Paille-en-queues* and some *Sterna alba*. We passed over the highest point of this mountain and came to the spur called Signal Mountain a portion of which has as an almost perpendicular face. It was formerly a Signal Station, with flag staff and house, but the latter is now in ruins destroyed by the only hurricane ever known to visit these Islands, in 1862. I climbed to the cap and hoisted a white flag on the staff in order that our friends of the *Forte* might know of our whereabouts.

Here we had lunch on, but found a number of uninvited guests. Large striped lizards[38] soon showed on every leaf, and grew so bold they fairly ran over us to get at bits of bread and chicken. At last they were daring enough to snatch food from our hands, they were however exceedingly difficult to catch, as they threw off their tails when seized by them. I am sorry to say I ill requited their friendship by imprisoning many of them in a bottle of rum. These lizards are inveterate enemies of the Geckos, and make war on them incessantly. I had noosed a Gecko with a horsehair and was drawing him in, when a lizard seized him and bit off his tail before I could interfere. The Gecko's only chance is flight as the peculiar formation of its feet gives it an advantage on a smooth wall over the sharp claws of the lizard. I found here a species of *Phasma*[39] about 5 inches long of a bright red, quite different to any species I know.

One of the first things a stranger would remark in Seychelles, a naturalist especially, is the curious mason wasp[40], that intrudes everywhere. It is of a bright brown colour about 1¼ inch in length. No place is sacred from them. As a friend tells me, they invaded his books and allied works of the most incongruous character with their muddy cement. The strong odour of nicotine in an old pipe did not prevent their filling the bowl with their cells. Even a piece of string left hanging from a shelf was appropriated as a foundation. Their cells, nearly hexagonal in form, about ½ an inch in length and diameter are built of red mud. No creature shows more wonderful instinct in its provision for the young than these wasps. A single egg is laid in each cell, when the female makes a terrible raid on the neighbouring spider's webs, carrying off and imprisoning the luckless owners until the cell is full, when it is at once covered with a thin coating of mud. It is supposed that the wasp stings its victims, and paralysis is ensues, so that it is easy to stow them away in the cell, which could not be done if they struggled. A supply of fresh food is thus laid up and it is supposed the poisonous acid of the sting possesses an antiseptic and preserving property; spiders and locusts having been found to retain their colours weeks after being stung, even in moist situations under a tropical sun. There is sufficient food for the larva till it is ready for the pupa stage. They are said to be dread enemies to cockroaches. They have one redeeming quality which ought to be generally known. They never attack if unmolested, so that on the approach of one, it should never be beaten away as is a common practice, for it is pretty sure then to turn and take an active part in the affray.

Soon after we commenced our descent we came upon a boulder about 15 by 30 feet and 17 ft. high. It had toppled over and was resting on 3 large round stones on the side of the hill, thus forming a sort of cave. My attention was attracted by some ferns growing near the entrance and some Lichens on those stones. I crawled in under the boulder on hands and knees, and found the whole roof covered with the nests of the mason wasps, which were flying in and out in numbers, and I must say, as long as I confined myself to being spectator only they left me alone. After I got out, I tried to detach a nest with a stick, when I was pretty quickly compelled to beat a retreat, as those belonging to other nests untouched, turned out like bees for mutual defence. I however escaped being punished for my temerity in intruding into a wasp's family circle unbidden.

Over this boulder was growing in wild luxuriance the *Piper Betel* so much used by the Indians for chewing, when mixed with lime and areca nut. Still more interesting to us were the beautiful Ferns, the *Acrostichum repandum*, and the *Lindsaea Riki*[41]. All over the mountain sides, growing in, even between the boulders was the grand Palm the *Stevensonia grandifolia*[42]. "A thing of beauty is a joy for ever" truly, for no matter how abundant may be the various

members of the Palm family, one never wearies of them, but looks up at them ever with a glad recognition of their wondrous grace and beauty. We soon came to a charming little brook, with a natural basin in the rock, and its silver waters were too tempting to pass, without refreshing ourselves by a plunge therein. There is a curious opening in the rocks near and we took out some specimens of minerals. I found in this water two plants that interested me greatly, one a fresh water *Cladophora*, and the other *Batrachosperma*. The boulders hereabouts are very much water-worn. Not far from this is a well built Aqueduct, conveying the water down the side of the mountain. We followed it for a good distance when we came to a fine grove of the Cocoa tree, *Theobroma cacao*. Clusters of fruit hung on every tree, but on examination we found that each kernel had been extracted by those voracious pests of these islands, the rats[43]. This plantation had evidently been at one time carefully cultivated, but was now abandoned. A few Clove trees *Caryophyllus aromaticus*[44] were still flourishing; their blossoms shedding fragrance on the air. I wonder this tree is not more often seen even in gardens. It is very handsome and the spicy fragrance exhaled from every part of the tree should make its presence most acceptable. In planting it however, heed should be taken that this tree absorbs moisture in so remarkable a degree that little vegetation will grow beneath it. However the value of a grove of Clove trees would well repay the land devoted to them, whether for the cloves themselves or the essential oil they yield. How many things are neglected that, though not perhaps sufficiently certain remuneration alone, would make profitable adjuncts to larger industries. I caught near here a number of *Euploea* and other butterflies very similar to the same species in Mauritius and one moth quite new to me.

I nearly met with an accident in our course downward, that would have considerably shattered all my ideas, if nothing more serious. I was hunting a curious centipede, a *Iulis*[45] about 2 inches long that inhabits the grass at the foot of coconut trees when a monster nut just ripe enough to fall clattered, down barely missing my head, which if it had struck it would have inevitably cracked from the force it had acquired falling from such a height. I confess it startled me considerably. However I secured many of the *Iulis* in question.

Many of the coconut trees thereabouts looked sickly and dying. A planter informed us that the grub of a beetle peculiar to these trees burrows near the root eating voraciously. He had cut them out round the collum [column?] of many, but he feared the mischief was too deep and that he would lose the greater part of his trees. This is not the only enemy of this useful Palm. A large black beetle, not unlike the female stag beetle[46], eats its way into the heart and then works down the tree. The only remedy is to watch, and on the least suspicion to use the knife sharply and cut out the intruder. We arrived at last at a good sized plantation of sugar canes, which belonged to Mr. Mallet called Maloustanta and here we found the use of the aqueduct. The water had been brought a great distance down the mountain, and was used by this gentleman to turn his cane mill, for grinding the canes, the juice to be distilled into rum.

On this day the Admiral gave a picnic to which we were invited, and had promised to join it in the afternoon. On arriving at Mr M.'s we found a large party dancing in front of the house. Directly opposite in a cocoanut grove a large tent was erected but tiffin was already over. As soon as the Admiral saw us he came forward and welcomed us heartily and most liberally supplied every want of the weary travellers. We declined figuring in the mazy dance, our rough and dusty costume not being exactly fitted for even an out door ball room, and we soon left, as we had still about 4 miles to go before reaching Port Victoria.

Some time after leaving the party we saw some of the pretty little birds called *Colibri*, *Nectarnia Dussumieri*[47], and I shot several. Our road now led us down towards the sea shore and we fell in with a gang of prisoners lifting stone into boats for the construction of the pier; and others busy burning the rocks, as before described, instead of blasting them. They were mostly large thick set Mozambiques almost nude. Further on, they were cutting down fine Bois Noir *Acacia lebbeck* trees for firewood, for lime burning. The Kilns are merely holes dug in the sides of the mountain in which the coral is burnt. Branching off is a wild ravine, and turning over the stones I found centipedes, scorpions, and other insects, and under the dead leaves some shells of the genera *Helix*, *Bulima* and *Pupa*. Fishermen were landing their fish for the market, but they had only a small variety most of which I knew. I caught up every sea weed I could see, but none differed from those I have taken in Mauritius. The following appeared very common; viz: *Lingbya Majuscula*, *Zonaria variegata*, various *Codiums*, a *Galaxaura*, a *Dernomenia*, *Actuotinhia rigida*, *Gracilaria dentata* a *Geladium*, *Corallina pedunculata* and several varieties of *Sargassum*. These were very few in an extent of over 4 miles of shore but they will enable me in a measure to compare the marine Flora of Seychelles with that of the Mauritius, as I have now nearly completed my list of Algae of the latter Island.

I noticed one remarkable circumstance, the almost total absence of plants of the order *Ulvacea*. I did not meet even the common *Enteromorpha* or *Ulva* that are found on nearly every shore from the Arctic and Antarctic basins to the Equator. Certain vegetation I remarked was apparently confined to particular localities; for instance on the reefs opposite the Trois Cascades, the *Padina Pavona*, covered it in great patches. Those near the Port, have masses of the *Gracillaria Crassa*. By the time we arrived at Port Victoria our *Vasculum* refused to hold another leaf, and our men bent under their loads, our very pockets so crammed we looked like walking museums. Though physically somewhat fatigued, we had found so much to interest us at every step, so much that was new to all of us, in our long ramble, that we forgot our weariness in recalling the incidents of the day.

VII.

On Tuesday September 7th I received an invitation from the Governor and Admiral to visit Praslin and the neighbouring islands the following day, and it was pretty sharp work to get all our preparations ready in so short a time. It was late before I finished, and then the anticipation of seeing these islands I had heard so much of, completely drove

away sleep. The window of my room looked on to the sea, and the soft fresh breeze came in delightfully. The scene that was soon displayed) before me as I lay in bed, made me forget sleep and all else for the time being. The moon, then in the beginning of the last quarter slowly rose from the Ocean, lighting it up till the crest of every wave showed molten silver, and to me it appeared to emerge between St. Anns [Sainte Anne] and Stag Island [Ile au Cerf], both of which lay clearly outlined. Heavy banks of clouds were massed on the horizon, half in shadow, half like sunlit snow, and it needed little imagination to trace out endless likeness to things on earth in the fantastic shapes they assumed. Still more transitory were they than even mundane objects, for before I had well decided on the form of some turreted castle or the outline of a polar bear, lo! as by magic, they were gone, and left but ruined crags, or mountain masses. "Pelion on Ossa piled."

Long before daylight Mr Horne and myself were up and about, and our luggage pretty nearly filled the boat that took us off to the Frigate. Sir Arthur Gordon who is also an early bird, arrived very soon after with his Secretary and Mr Commissioner Franklin, and we were soon out on the ocean. We arrived at Praslin about mid day, but could not steam direct to it on account of the dangerous rocks, but had to make a detour round Ile Curieuse, into a beautiful bay formed by that Island and Praslin. These rocks have a singular appearance, reminding me of old Druidical ruins I have seen in France and England.

We anchored about three quarters of a mile from the shore, and soon the Governor, Mr A. Gordon, Dr Micklejohn, the Surgeon of the Frigate, and myself, landed at Curieuse. We were received by Mr George Forbes, an old Scotch-man who has lived there over forty years. We visited his house where he shewed us his collection of shells, and gave us some crystals he had found in the granite. Then we went on a tour of inspection through the Establishment for Lepers. Small comfortable huts are erected near the sea shore, shaded by Palms and Coco nut trees, and each contains a cot and some plain furniture, utensils, etc., and were very neat and clean. Some were seated at their doors, but most shewing ghastly sores, and some were literally dying by inches and unable to leave their beds. In every cabin is a coffin ready for the inmate, which must I should think have a depressing effect at first, but from habit they don't seem to mind it. It is however a wise precaution, as from the nature of the disease, when death ensues, interment must be immediate[C].

If Mr Forbes had kept a journal of his experience during all these years, what an awful record it would be, of this, the most direful ill that flesh is heir to. I have seen a good deal of leprosy in Spain and Portugal, also in S.America, but it struck me that the disease at Curieuse assumed a different form to any I have seen before. I was glad to turn aside, for there is to me something so loathsome and repulsive in this disease, and verily the man who has spent best part of a life relieving as far as possible its wearying agonies, is worthy to be reckoned amongst the world's heroes. This island was formerly well covered with the *Coco de Mer* (*Lodoicea Seychellarum*)[48] but only their relics, in the curious old hard bowls remain of them, except a few that have been planted by the orders of Government. There is no level land but the strip on the shore where the huts stand, the mountain rising directly from it to a height of about 250 feet. It is entirely of granite, but it is so time and water worn, and in so decomposed a state that large pieces will often crumble under foot when trodden on. Mr Gordon and myself walked over the top of it, and I got a few dragon flies and butterflies but all old friends. I found the same lizards and gecko as at Mahé, scorpions and centipedes, but my time was too short to make a careful examination. We left Curieuse about 5 o'clock, and returned to the Frigate.

Next morn all were up bright and early ready to go on shore. The Governor concluded to land with a party on the north of the Island, and walk across to Mr Campbell's house. All equipped in easy costume they set off, and early as it was the sun shone out fiercely. I decided on taking our baggage and steaming round in the launch. We took a coloured man as a pilot, but when we got towards the Anse Marie Louise, the sea broke round us, and the launch danced about like a cork, and rolled till I thought her engine must come out of her, and as we ran into the pass we shipped considerable water. However the midshipman in charge managed her capitally and we got there before the walking party. Mr Campbell was on the beach with some people, looking out for the Governor who was expected to come in the launch. I introduced myself and he politely led the way to his house.

Sir Arthur and his party soon arrived, looking considerably the worse for their 5 miles tramp in the sun, their coats and jackets all left behind, or at least invisible. Mr Campbell with his family and neighbours were in a state of great excitement and no wonder. Was it not the first time that Praslin's soil had e'er been trod by one of Her Majesty's Representatives! I was not a little amused at these good people, out of whose eyes shone the heartiest welcome, trying to subdue it within the proper bounds of reverence for so august a personage. That soon passed away and the old Scotchman's native tact come to his aid, and he did the honours of his place in a manner that would have done credit to a higher sphere. No doubt His Excellency coming from north of the Tweed gave a heartier ring to his welcome, and an additional pleasure to what will be the greatest event of his life time[D]. As soon as all had removed the effects of the

[C] Great praise is due to Mr Forbes for his kindly treatment to these poor outcasts of humanity, and it reflects great credit on the Government for providing so comfortably for the poor creatures. This terrible plague is as yet unknown in America, and I pray God to keep it for ever from our shores.

[D] To shew how easily the human mind grows habituated to what we are accustomed to regard one of the saddest sights viz a coffin, I will mention that when in the Cape I was informed, that far up the country the Dutch Boer always keeps his coffin in his ordinary family room. As soon as he is a man of some substance, he goes into the forest and selects the finest timber tree he can find, helps to cut it down, and has a coffin made of most capacious demensions, for the chances are, he is over 6 feet high, and as he ages, will become stout in proportion. If a rich man, formerly it was elaborately carved. When completed it is used as a corn-bin; and the Fraaw if there is one, places her milk pans on it. This is not I

journey, we were seated under some fine old Badamier trees, and coco tendre, calou and cocoa milk and spirits were handed to us which were very refreshing.

Near by a pavillion had been erected covered in with leaves of the Coco de mer, and one single leaf formed its end, and it could have covered a much larger surface; the leaves are pegged down with wooden nails made of bamboo split. We did not long wait for breakfast, and 14 of us sat down to a table covered with everything the island could produce, and I promise you we all did it ample justice. The sides of the pavilion were festooned with Lycopods and flowers and an idea I never saw put in practice before gave quite a novel effect to the decorations. Between every festoon hung a bunch of Mandarin oranges and sweet lemons, even from roof, to just within reach.

After breakfast, all set off exploring, and of course, our first visit was to the grove of the world's wonder the *Coco de Mer*, indigenous only to Ile Ronde, Curieuse and Praslin. From the first it has entirely disappeared; from the second, as above stated, it is fast vanishing and at Praslin it is still flourishing but if not more care is taken to plant fresh ones, as the old are so rapidly being destroyed a nut will be soon as great a rarity as when the Emperor Rudolph offered 4,000 florins for one. To me as to most other people the first sight of a full grown tree was somewhat disappointing. A tall thin stem towering up over a hundred feet with a ragged head of green and withered leaves does not impress one. A cocoa nut is decidedly handsomer. These, however, are the male trees, the females rarely are over 60 or 70 feet, and not being so high are less exposed to the winds but when old are not much better looking than the males. But in this grove, the tree is to be seen in all the beauty that has made it so famous. It is certainly one of the loveliest vegetable productions when about 20 or 15 years old before the stem begins to rise. The leaves have then perhaps attained their greatest size and are in the highest luxuriance before fructification commences. (Its curious process has been too accurately described by Mr Ward and Mr Clarke to need detail here.) Of course we saw trees of all ages, and the nuts from the first stage when it looks only like a large green berry on a twisted stem, through all its changes to the hard conical looking nuts when fit for exportation, or to be cut up into the various utensils made from the hard shell. To me the first act of the plant's life is about as singular as any. It takes 9 or 10 months after planting before the germ is ready to shoot, when it ignores its parent bed and shoots away nearly 20 feet before it rises, and each leaf requires a year's elaboration in sun and air before the next appears. Considerable difficulty too attends the birth of one of these trees. If the nut does not fall with the germ downwards, when it strikes and does not meet the ground to draw its sustenance from, after an ineffectual struggle for some few feet on the surface, it exhausts all vitality from the nut, and the heat and want of moisture finally destroy the vegetable baby. Every nut grown for some years ought to be planted to keep up what *may be* a connecting link with an antediluvian Flora, and which *is* unique in its kind and confined to such an isolated corner of the world. The texture of the articles made from the young unfolded spathe, are too well known to require description. It would certainly be a handsome heirloom to his children if every proprietor of even a small plot of ground would plant a few nuts of these trees, though he could not hope to reap any benefits from it, his children and grand children would. It wants little trouble like the common cocoanut, but it grows while he sleeps, and the labour of this generation would be amply repaid in the next.

We crossed a march over a road made expressly for the occasion by Mr Campbell, and up to a hut which was to be the base of our future operations. We explored till pretty late when we ended our day by a good dinner, and slept at Mr Campbell's. Next morning the Governor and his party started to walk round the Island, and Mr Horne and myself to explore the valley and then climb to the highest point literally the backbone of Praslin. We began in the grove of the Cocos de mer. I was stripping some of the dead leaves of these trees looking for insects, and wherever it was damp I found at the base of each, a species of *Typhlops*[49] from 14 to 16 inches long, and twice as large as an ordinary goose quill; jet black in colour, but so active they vanished like a flash of lightning, and though I saw so many I only succeeded in capturing a small one. I never saw a snake with such rapid movement. It was quite new to me, and I was a little afraid of it, particularly as the men gave it the credit of being poisonous. Not one of them would attempt to catch these snakes.

We came here upon another floral beauty. I thought I had found a new fern, but Mr Horne soon settled it as the common langue de boeuf *Asplenium Nidus*; but under such unusual conditions it was scarcely astonishing I did not recognise it. From between the granite boulders the fronds sprang up to a height of 9 or ten feet, and 12 inches broad. Great clumps of it were met occasionally. It is on the Coco de mer that are found the large shells of the *Helix Studeriana* of two varieties, dark brown, and olive yellow, and the pretty little *Cyclostoma insulare*[50]. The former may be seen up the stems through one would think they could scarcely pierce the bark which is so hard as to require an axe of the finest temper to cut it. When young it is said the Helix eats its way into the nut, but as it increases in size it cannot get out of what eventually proves its prison grave. We came to numbers of trees loaded with mandarin, oranges and sweet lemons of which we took a provision in our vasculums. Though we were not at a loss for refreshment as cocoa nuts grow every where, and you can always get a darkie to climb for the fruit by the inducements of the smallest coin. As we climbed the mountain I looked in vain for the black and green parrots once so numerous there, and the beautiful

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am told from any religious feeling, but that when he dies, he may have a coffin of good seasoned wood, that will not easily rot. I apprehend the origin of it was, that, as there were no cemeteries up the country, hundreds of miles formerly intervening between the churches, every one was buried on his own farm, and if great care was not taken to dig deep, which the rocky nature of the soil would often prevent, the chances were the jackals would dig him out, and if his coffin was not sound, he would be made a meal of before it could be discovered. A termination to his relics, not at all agreeable to Dutch notions.

pigeon *Erythroena pulcherrima*[51] with its lustrous black plumage with a violet sheen when in the sun, and brilliant scarlet head. I saw a few birds but could not get a shot at them. As to the *Cateau vert Palaeornis Wardi*[52], I only saw one in all my walks and that was the first day of my arrival, and though I employed a men on purpose to hunt for them I did not succeed. They tell me these birds have been so destructive to the maize and other grain that the people have waged war on them, till they will soon be extinct. The *Cateau noir, Coracopsis Barklyi*[53] are seen at times but they are scarce. They seem to patronize the *Filaos* (*Casuarina*) which I find are called *Cédres* at Praslin. I saw a few of the Pie Chanteuse *Copsicus Seychellarum* near Mr Campbell's house which he told me he had brought from the Island of Ladigue, in hopes to renew the breed, as he said he did not think there was one left in Praslin.

The heat was oppressive, for the tops of these mountains are only covered with scanty bush, of slight growth shewing that it had only been there since the last conflagration. Fires' are of frequent occurrence and do terrible damage to the trees especially the Cocos de mer. The island is not quite 8 miles long by about 3 broad, with a good deal of marsh land on the coast, and doubtless from this upwards the mountains were formerly very densely wooded but now, timber trees are very rare. We passed over the point of the continuous chain of mountains to the N. E. and then descended to the shore. We found some Tatamaca trees of great size which Mr Horne pronounced of a different species to those growing in Mauritius. I was surprised to find such a scarcity of animal life. During our long walk the only birds I saw were those already mentioned and the *Merle Hypsipetes crassirostris*[54]. The latter bird appears common in the island and so tame it is easily approached; I shot several, and prepared their skins. I did not see a specimen of coleoptera although I looked carefully in places most likely to meet them. I caught a fine Death's head the *Brachyglossa atropos*[55], which appeared more like the European than the Mauritian type. The only other animals I found were some large green lizards[56] and these were so unlike the generality of lizards, that I caught them by hand without any trouble. We terminated our descent at Grand Anse, and were received by the Rev. Mr Vaudin who met us on the beach and kindly invited us to visit the Church establishment close by. The Episcopal church is a good sized structure built I believe by the inhabitants of the island about 20 years ago. There are now about 400 members, out of which over a hundred are communicants. The establishment is under the direction of a catechist, a coloured man, who receives 20 dollars a month from the Society for the propagation of the Gospel, I think they told me. Every two months the Rev. Mr Vaudin visits the island to administer the sacrament, baptise or marry, as occasion requires. Round the Church is a pretty garden and a cemetery lies behind it. To judge from the few graves, the death rate must be at a low figure. There is also a school house, but it is such a distance for little folks to walk to it that there are only about 20 regular attendants. The school mistress gets 12 dollars a month and profits of the coco grove surrounding the place.

We returned to Mr Campbell's along the shore. In one of the little caves we saw some fishermen just come in from sea and unloading their boats. To my astonishment I found in one of their baskets three specimens of a fish I have been hunting for a year past in Mauritius, vainly. The *Myripristes lima*[57] or very near it, a single specimen of which was sent over 40 years ago to Baron Cuvier and appears to be unknown since. I had a sketch of it sent by Professor Agassiz requesting me to procure as many as possible of it, and though I have swept hundreds of fish in my net, and attended the market almost daily I have not yet met with it in Mauritius[E]. I found a good many sea-weeds and remains of shells on the shore sufficient to prove their existence in this locality. We again slept at Mr Campbell's house but next day bade adieu to him and his hospitable family. We crossed the mountain and descended close to the remains of what was once doubtless a fine dwelling house, but it and the 130 once luxuriant garden were mere wrecks; and the proprietor long dead. We fired a gun as a signal and a boat put off from the Frigate and took us on board. The following day being Sunday we lay still at our anchorage, and it was always most religiously kept, as I observed before. Mr & Mrs Campbell came off and joined in the services of the day.

On Monday we steamed away and brought up at about a mile from La Digue. The Governor and a party left in the launch for Félicité. After their departure, Cap. Fairfax kindly put his cutter at my disposal and we rowed away to La Digue. It looked easy enough to land from the ship, but on approaching we found a strong current running 14 knots an hour, and the surf breaking on the shore. A boat put off to us and signed to us to hold on, and we did so till they came up, when they said that the pass was very dangerous, but they would guide us in. Only a few years ago Dr Robinson with an American Captain and eight of his crew were drowned whilst attempting to land. They piloted us safely in and then I saw about 100 people assembled on the shore. As soon as I landed I was greeted by the firing of guns and pistols, ringing of hand bells and letting off crackers, and found I was receiving the honours due to His Excellency.

I was so astonished at my reception and the din of the 'feu-de-joie' that for a few minutes I could not make it understood I was the wrong man. At last I announced myself as the American Consul, but assured them the right man would be along in an hour's time. In spite of my loss of dignity I was warmly welcomed, and after partaking of some refreshment I made my way to Mr Nageon's place, escorted by a policeman, through a grand coco nut tree avenue nearly a mile long.

La Digue is about 4 miles long by one broad, more wooded than any other of the islands I visited. It has about 600 inhabitants mostly coloured, and a pretty Catholic church which they told me was well attended. Mr Nageon has the finest coco grove there; about 60,000 trees all in full bearing, yielding about 8,000 velts annually. He has planted young trees very largely. His drying bouse is recently built, and in a most improved style. The roof of corrugated iron, is made

[E] I may here state that after all I lost my fish as the glass jar in which they were preserved with many other valuable specimens of Natural History was smashed when my luggage was being put on board the steamer, and the contents fell into the sea.

to run off and on at will, so that should a storm occur, the coco nuts can be covered in a moment. Mr Nageon appears to be an enterprising man, one of the few with really an eye to the future. So soon as I arrived I had breakfast with the family and then set out looking for specimens of Natural History. Just behind the house is the monster boulder noticed by former visitors. I thought I had already seen the largest granite boulder to be found, but all sink into insignificance in comparison with this. It is true granite, about 125 feet high and nearly half a mile in circumference, very much water worn and I was told inaccessible. I wandered about the forest and found many interesting objects. The snakes I get were the same as those found in other island, and are peculiar to this archipelago, the *Tropidonatus Seychellensis*[58]. Mr Nageon gave me a small turtle[59] which is found only at La Digue, I saw the beautiful Widow Bird, *La Veuve Tchitrea Corvina*[60] described already so well by the Honorable E.Newton, which he gives as a native of Praslin, but I doubt if a single specimen is to be met there now, and fear it will soon be another of the extinct birds of this region. I shot a female, in her black dress which I suppose give its name, but did not succeed in getting a male, though I saw two or three. The plumage varies so much, the latter might be taken for a different bird, for the only black it shews is on its head, so glossy and so relieved by the brilliant blue and yellow beak and bright sharp eyes that he wears no sign of mourning for his coat is of brown with a snowy vest. The female however in the sun has a glint of colour to relieve the sombre grey black of her plumage. I did not see any of the *Mangeurs de riz*, *Foudia seychellarum*[61] though said to be there.

We returned on board about 4 o'clock p.m. when the Frigate had her steam up and sails loose and we soon left our anchorage when under full headway there was a cry of "man over board" spread through the ship. All was excitement and every one rushed to the rescue, but luckily the poor fellow in his fall from the bowsprit caught in the chains, and thus was saved from a watery grave. We soon reached Mahé, but when within 3 miles from the shore, the Frigate hove to. A number of boats were in waiting for us, to take us to shore, as the Admiral had decided to proceed that night on his voyage to Trincomalee. We bade Adieu to our friends to whom we had become much attached and wished them God speed to their destined port.

VIII.

On the 12th September a deputation of Free-Masons waited on me with an invitation to a Banquet to be given in the evening, which I accepted. During the day Mr Horne and myself packed up our traps, with a good store of bread, canned meats, wine, &c., all ready for a start at daylight next morning up the mountains. The owner of the estate *Exil*, Mr Jean François Chauvin had kindly given us permission to rusticate there for some days, and a sort of Pavilion for lodging. Mr Commissioner Franklin had temporarily repaired it for us, and sent us four men to carry up our belongings and make themselves generally useful. They were stout Mozambiques encumbered with the smallest modicum of clothing necessary. From sundry peculiarities discovered later we named them *Drowsy*, *Grumbler*, *Gourmand*, and *Tipsy*. Their distinguishing qualities easily guessed from their names.

In the evening I visited the Masonic Temple and was very handsomely received by the Officers and Members of the Lodge, with the honors due me as S♠ P♠ R♠ S♠ [Sublime Prince of the Royal Secret] of the G♠ O♠ F♠ [Grand Orient [Lodge] of France][62] During the evening I witnessed two receptions which were conducted in true masonic style. The Temple was filled with the leading men of the island, and when the business of the Lodge was over, we adjourned to the Banqueting room. After discussing the bountiful supply of good things provided, speeches were made and healths drunk, and I quitted the Temple with favourable impressions as to the progress of Masonry in Mahé. The lateness of the hour left me little time for sleep.

At day dawn we were on the move as our climb to our mountain home for the next few days was to be nearly 2000 feet above sea level. We equally distributed our provisions, vasculums, pressing boards, bottles, &c., among the four men, and hurried off so as to make as much head way as possible before the sun was high. Our first rest was in the cocoanut grove of Mr Aristide Dupuy some distance up the mountain. Here we saw the sun rise gloriously from the Ocean to the cloudless blue sky, which we did not appreciate as much as such a scene deserves from the but too certain indications of a glaring hot day.

Here the guardian offered us the use of a house if we would remain, but after taking some coco nut water we pushed on till we came to a grove of stunted trees. Among them we found a curious Vacoa[63] tree the first of the kind we had ever seen and it interested us greatly, Mr. Horne deeming it a new species. Aerial roots, descended from the branches all round the trees nearly to the earth (in many we saw later they had reached it.) They were perfectly round, and some of them as large as the trunk itself. Whether these strong aerial roots are for steadying the stem in case of high winds or for drawing additional moisture, I know not but for both purposes, I should suppose. The tips have an outer coating to protect the cellular integument in its downward progress, but once on the earth it quickly buries itself and each one helps to imbibe nourishment probably for the perfection of its fruit. Mr Horne took a number of seeds and leaves.

After leaving the grove we came to a patch of coarse rank grass 8 or 9 feet high. We found many Chameleons on it, and the red *Bulimus velutinus*, and I got specimens of the large *Iulus*, *Spirostreptus obtusus*[64]. We came to a little plateau, and were anticipating the end of our journey, when we found we had still a long pull up a steep rockly path of some hundred of feet. It somewhat dismayed us, for we were already well fagged, but resting a little, and getting rid of one outer garments we put a good face on the matter. When about half way up we came to a bright little spring of water gushing out between the boulders, and Mr. Horne was lucky enough to find a beautiful Orchid in full flowers which he appropriated instantly. It was a little break in our hard climb and helped us on the rest of the way and we were not sorry

when we got to our quarters which Mr. Horne at once christened the Eyrie, and well named too perched as it was on the top of the rock we had just climbed. How the poor Mozambiques dragged themselves up with their heavy load I don't know, it was as much as we could do to carry ourselves.

Breakfast was soon on foot—and after a quiet pipe, we got our hammocks slung and our house in order. We all took a rest and the men fixed up a shelter for themselves while we examined our quarters. Our house consisted of one entire room, and a second with only a roof on posts. It was situated on the one of the little plateaux so numerous in these mountains, and behind it rose a high granite wall of rock and out of the crevices in it grew the [endemic] *Stevensonia grandiflora* Palms, in every stage, and we looked longingly at the Ferns and Orchids which hung above us as hopelessly out of reach as the foxes' grapes.

When pretty well refreshed we began our explorings and entered some of the ravines of the Morne Blanc. We had constantly to cut our way through the rank growth of Ferns and underbrush, and occasionally were brought up suddenly by a huge boulder, and had to cut a path round it. We penetrated about half-way, but found it such hard and slow work that it would be night fall before we got to the top. We declined sleeping in the bush, as showers fell most every night so we returned home, Mr Horne with I know not what of rare and beautiful I saw him snatching up at every turn, and my vasculum filled with land shells, centipedes and scorpions. I got a good supply of the fine *Helix unidentata*, a small Helix resembling the *Similaris*, a silvery looking *Pupa*, the striped and plain *Bulimus fulvicans* and the *Helix insulara*[65]. After our dinner we amused ourselves watching the Flying Foxes (*Pteropus Edwardisi*)[66]. Some appeared very large but flew so high and wheeled so rapidly it was impossible to get a shot at them. They came out of the Clefts in the high rocks behind us, flying to a grove of *Badamier* trees where they fed on the nuts. While we were enjoying our pipes and discussing the treasures we had accumulated in the day, I was surprised to hear a sort of shrill prolonged whistle as if from a child's voice that seemed to come from the Cliffs. Mr Hickie, a policeman, who had joined us, said it was the cry of a very curious bird that only made its appearance at night. He told us he had never seen but one, though he had been so long in Mahé, and that was found killed under a fallen tree where some wood-cutters were at work. It lives only at the top of the mountain, is as large as barndoor fowl, with long legs and is of an ashen grey colour, according to his account. I was so much interested in the story he and a forester gave us of the bird, I offered a handsome reward for a specimen either skinned or in spirits. The one that paid us a visit, kept up his cry nearly the whole night, and a queer one it was such as I never heard from a bird before[F, 67]. The fresh specimens of Natural History I had procured were put temporarily to cleanse them in a jar of Mahé Rum placed in our outer room. I had a good many of the previous day's in our bed-room in some poisoned rum brought from Port Louis, luckily as it happened. When we got up next morning and I went to look at my jars, the one in the outer room was full of the specimens truly, but the rum was *non est*! Mr Tipsy had drunk it all! A precious draught he must have had, as any naturalist will easily guess who knows what the first spirit is like that has snails, snakes &c. steeped in it. He did not appear any the worse for it, but I was obliged to send back to Mahé for a fresh supply much to the annoyance of Grumbler. It is well he had not hit upon the poisoned one, or I might have been had up for murder. As it was I so frightened them about the poison I was going to put in the next rum I got, that I had no more theft.

We determined on climbing to the top of the Morne Blanc which is the highest point in the Island. We got on very well through the path we had made in the ravine the day previously, but after that had to slash about us to get along. Towards the top we found the vegetation very spare. A short time before a party from the "Forte" with Lieut. Halifax had climbed up to it by another road and had left a flag flying, but suppose the wind had carried it away for we could not find it. They measured the mountain the day of their ascent, and gave me the result as 2,998 feet.

The view is very fine from the summit. Looking down to the harbour, the coral reefs lay distinctly mapped out and at this height had a singular appearance. The sea lay calm as a mirror and blue as sapphire, but the reefs looked like sheets of ice grounded near the shore, the edges furrowed and indented as if they were beginning to thaw. The various islands of the group seemed to lie at our feet. The wooded sides of the mountains shewed well with their grand Palms and trees and bearing flowers whose names I know not; the surrounding peaks seemed so near as if we could touch them by a stretch of the hand. Above, below, all was bright and exhilarating, but the spot on which we stood was very dreary, only a little coarse grass, a stunted tree or two and the granite rocks crumbing beneath our tread from the wear of time, light, air, and water. It was late before we returned, and we had little to repay us for our toil save the view. In the evening we saw many fireflies some of which I secured. In the grass round our eyrie we caught some of the *Tropidonatus seychellensis* [snakes] of different ages and in so varied a dress that any one not knowing them must have mistaken them different species. Earliest next morning, we were astonished with a visit from Sir Arthur Gordon who climbed to our quarters alone. Some time after, Mr. A. Gordon arrived. We did the honours of our mountain home to our guests, but we could not induce His Excellency to remain for breakfast, so after a long chat he left us to return to Mahé for his morning meal, which I should think he needed by the time he arrived there. We accompanied him down the spur below our house, when he continued his route alone and he went at a pace that shewed he was well used to a cross country tramp.

We devoted this day to the exploration of a mountain peak to the S. of us. We took a coloured man as our guide, but getting fatigued at our long walk he skeedaddled. However we had old Drowsy and Grumbler and they forget for once their characteristics, and though they did not know any regular path, like monkeys they seemed quite at home

[F] The Hon. Newton who so perseveringly collected the Birds of these Islands, many of which are exceedingly rare, but did not escape his notice, informs me that he never even heard of this bird.

in the bush, and soon found us a way. They were quite delighted with our day for they found abundance to eat. I never saw a nigger yet that couldn't find something to make a meal of on a tramp, from a cabbage palm to an earth nut inclusive. Here there was no need to go to these extremes, for there was any amount of mandarine, oranges, guavas &c. with which they beguiled the way. In one of our rests Drowsy gave us a little of his personal history, when it appeared that his "lines" had fallen in anything but "pleasant places" formerly, and the recital woke him up to most unwonted energy.

He had not been many years in Mahé, but had been stolen by the Arabs from his country which he indicated by pointing over the Ocean to where it lay. He had seen his father and mother killed, and he with a number of others had been put on board an Arab Dhow, where they were terribly beaten and ill used. They were fastened hand to hand to pole, so that no one could jump over-board, and if, when pursued, the Arabs could escape in their boats they would often scuttle the Dhows or set fire to them so that there was no hope for poor wretches. This time they were suddenly attacked by an English steam launch and captured. The slaves were sent on board the *Columbine* Man of War, and the Dhow was burnt the slavers thus meeting the cruel fate they had destined for their victims, if the chances had been in their favour. We asked if he wanted to return to his native land, but he said "No, Mahé very good place, me well treated and when me work me get plenty eat." We returned laden with rare and interesting botanical specimens, but with the exception of a few common shells I saw no other object of natural history. I don't remember seeing a single bird, not a sound broke the stillness of the woods save our own voices and our foot steps as we forced our way through the thickets. As we rounded the foot of the spur of the mountain we came upon a hut occupied by an old man. He was the oldest black man I saw in the Island, as grey as a badger, but busily occupied preparing green bananas for his supper. He told us he was once a slave and remember some of the former French Governors.

After dinner we lay on the grass outside, and the men improvised a dance for our amusement. The music consisted of an empty tin biscuit box held on the breast and struck sharply with the fingers. All sang, if singing it could be called, made up of cries, and wails and yells clapping their hands in time to the music (save the mark). They kept up their dances with a vigour I should not have given Drowsy credit for. The fun grew fast and furious, and we were obliged at last to put a stop to it so as to get a good night's rest, as it was the eve of our departure.

I had forgotten to mention that we had not been utterly without game. One morning at breakfast time we were astonished by a visit from a maroon Sow[68] with a litter of 13 young ones, pretty little stripped creatures. All were at once the alert for a chasse. A chasse, if without honor, certainly not without danger. The old mother was a vixen A. I. and we had to look sharp to keep clear of her, for the way she grunted and chased *us* was worth seeing. The little ones too were as active as cats, and what with their squeals, the Sow's grunts and the men's yells it was a very Babel. They succeeded in capturing three in spite of the mother, and at last drove her off. They arrived safe and well in Port Louis, and to see their cunning ways, and good appetites, no one would suppose they were only young sucking pigs, they might have been on their own hook for months. Mr Gordon left us next morning, and we packed up all our loot of every kind and sent it off to Mahé by Grumbler and another man, and we left our *Eyrrie*, for new explorations.

Our way lay over one of the most villainous paths of the island, covered with great boulders. Frequently we had to cross half rotten trees which had fallen over them bare-foot; boots we dare not trust to, for a slip would have sent us down and jammed as in between the boulders, where help would have been almost out of the question. When we had crossed this bad part of the mountain we came out into the woods and found a very fair path. This we ascended till we came to the spur, passed over it and then descended into the Black forest.

After traversing it for some distance we came to an immense grove of Clove trees, some 40 to 50 feet high. Thousand of young trees were on the side of the hill, enough to make a fortune to any one who would work them properly. The soil evidently suited them, for the ground was covered with the fallen fruits and they were shooting in all directions. Many were in full flower, others just in the state for gathering the clove of commerce, which is the tubular calyx with a roundish projection at top, formed by the unfolded flower buds. Many of the trees had been cut down, and coffee planted in their places. It was a luxuriant spot with a stream of water flowing through it and it was Mr Horne's opinion that it was an admirable place for the cultivation of any tropical production, yet this, that might be made an earthly paradise was apparently uninhabited. On our descent we come across a patch of sugar canes, and a very primitive mill for crushing them. It was made under a temporary shed hidden in the jungle and consisted of a sort of table grooved at both sides for the juice of the cane to run into, and a tub of one end to catch it. The canes were cut into short pieces and crushed with the trunk of a tree about 20 feet long that has been barked and roughly fastened at one end to a live tree. This was then rolled backwards and forwards over the canes at one end of the table. We saw no still but I presume there was one handy. I had been attracted to this lonely spot by a number of butterflies and as I pushed through the tall grass I came suddenly on a pile of *bagasse*[69] and the shed, and the owners, two colored men looked quite disconcerted at my presence.

This Forest is wild and romantic in the extreme. Near the foot of the ravine we passed through, we noticed where a fearful slide of rocks from the mountain had taken place. Thousands of tons of rocks had been detached from the peaks above crashing down for over a thousand feet, enough to give a shock to the whole Island. Numerous rocks lay loose on the top and sides of this mountain, ready with a very slight impetus to roll into the valleys below; and it gave a somewhat unpleasant feeling to look up at the craggy sides, and think that at any moment one of those erratic rocks might follow us.

When we got well down the scene was very picturesque. To the right stretched a grove of Cocoa nut trees as far as we could see, with little elevated spot between where stood small huts. I suppose for the guardians. Down near

the shore was a pretty cottage belonging to the proprietor of the place. The line of breakers combing and foaming on the rocky shore with little islets covered with Cocoa nut trees that appeared to stand in the midst of the crested waves made up our picture. We rested and had some Cocoa nut water at the house occupied by the guardian of Mr. George Sauzier, and we then went ahead, for we had many a weary mile to go before we reached one resting place for the night. We got out of our path and it was only on turning back to the shore we were all right for South Point. It was noon by when we arrived at Mr. Marchand's house, and with the usual hospitality of Frenchmen he invited us to take breakfast, an offer most gladly accepted. This gentleman has a fine plantation, and he has recently made, great additions to it, so that he anticipated shortly very large oil crops. We were shown what appeared to be very fine sugar canes, but Mr. Horne thought they were deficient in saccharine matter. Mr. Marchand said he intended to cultivate Tobacco on a large scale and I do not doubt, he will find it a profitable speculation, when well managed.

After we left our courteous host, and kept on the shore I gathered a good many shells and marine plants. Mr Horne was not behind-hand in his botanical researches, I abstain from more than just touching on the Botany of the Islands as I have done all through these letters, as Mr Horne is making up a Botanical Report on them. When we were beginning to feel fatigued we met an old Man of War's man a Mr Green, and he told us we were very far from South Point, and that it would be advisable to go to Mr Felix Poole's near by, who would put us up for the night. This suggestion was too valuable to be neglected and we went at once to his place.

When we were refreshed we took a stroll to the Church and were introduced to Père Pierre Valentin, who welcomed us warmly. The bells were rung and guns fired in honor of our visit. The good Père showed us a fine collection of Marine shells he had gathered from the shores. Mr Poole gave us a most excellent dinner, and a comfortable little Pavillion to sleep in, and I shall never forget his kindness and attention to all our wants, nothing could be more cordial and hearty than our welcome. Mr Poole is by birth a Swiss and a baker by trade, and also keeps a sort of general store with the sign of the "Pauvre Diable."

After thanking our host for his hospitality, we proceeded on our way to South Point. Our path lay partly on the mountain and the rest by the sea shore, till we arrived at Mr Sedgewick's plantation, where we slept Sunday and Monday night. The Cocoa nut grove is not so extensive as many I have seen, but it is in fine condition. I could not help noticing how tall and straight the trees are in these Islands compared with those in Mauritius, where it is rare to find a top that has not the greater part of the trees with crooked stems from the high winds. Mr Sedgewick appears to be an enterprising man; he has a Carpenter, Cooper, and Blacksmith's shop on the place; and builds his own boats. He dries the Cocoa nuts for oil making, by artificial heat in an oven, a much more expeditious way than that generally adopted. When the nuts are cracked, the kernel is taken out and is ordinarily dried in the sun before passing it through the mill, a very slow process. We were treated with the usual kindness extended to strangers in Mahé and left on Tuesday morning.

When, within some distance of the 'Trois Cascades,' Mr Horne went on ahead for Victoria and I remained behind. The reefs make off here to a good distance and I waded on to them. I found little to repay one, except a few shrimps, starfish, &c., and some common shells. My examination of these reefs shewed me still more, how closely they resembled those in Mauritius. For about three miles they were covered with the *Turbinaria ornata*, *Gracilaria* and *Padina Pavona*, and not another weed could I find.

I remained so long on the reefs it was nearly dark when I turned homewards, and the scrambling over boulders in the dusk is far from pleasant. I was hurrying on when I was overtaken by a rather shabbily dressed Englishman. He entered into conversation, and incidentally mentioned that he was of high family, had been doing India—had killed 22 tigers, &c., &c., and was now on his way to S. Africa to shoot larger game. The Hippopotamus, Rhinoceros, Elephant in short anything that came to hand. He was or intended to be a second Gordon Cumming. With half the nobility of England he seemed perfectly familiar, and after a long tirade, by which time, I can only suppose, from the sequel, he had set me down as a green Yankee just out on my travels; he asked the loan of 5 dollars being short of cash at the moment! I will only say, he didn't get it, but before he left he was very glad to accept half a dollar. I have seen abroad too many of these loafers, all belonging to "the First Families," but in a decidedly reduced condition, too proud to work, but not ashamed to beg or spunge on any one not up to them.

It was nearly 9 o'clock when I arrived at the Victoria Hotel, kept by Mr Ducasse, and I would recommend all travellers in Mahé to try its accommodation. The 21st September was the day of the Banquet given to the Governor, and after that to the 24th we spent in packing up and visiting Mahé. On that day we left in the M. M. Steamer *Danube* for Port Louis. Thus ended my trip to the interesting islands, I should have liked to spend another month there, as there were many places I had had to hurry over, that wanted close examination, and others I had not time to visit at all.

Whatever may be the faults of the Seychellois, I must bear testimony that kind heartedness and hospitality are among their most prominent virtues.

N. PIKE.

[1] Major-general Edward Selby Smyth, acting governor while Gordon was away.
[2] Edward Newton

[3] Anglo-Indian word for a light, or sometimes substantial, lunch.
[4] Pike often used '-oe' for '-ae' in family names etc; we have corrected his occasional 'Algoae' to Algae. In this case he is referring to a sea-skater, *Halobates* sp. (Gerridae)
[5] now *Physeter catodon*
[6] *Margaroperdix striata, Numida meleagris* and *Pavo pavo* respectively; see A.S. Cheke (2004) Boobies on Agalega... *Proc. Roy. Soc. Arts. Sci. Mauritius* 7: 1-6
[7] She-oak *Casuarina equisetifolia*
[8] respectively *Fregata* spp., Red-tailed & White-tailed Tropic-birds *Phaethon rubricauda* & *lepturus*, Red-footed Booby *Sula sula* (see also Cheke 2004, *loc. cit.*)
[9] now *Cavolinia globulosa*, but could be an other species of these curious pelagic molluscs
[10] *The Battle of Dorking: Reminiscences of a Volunteer* is an 1871 novella by George Tomkyns Chesney, evoking a fictional defeat of Britain by Germany, following Bismark's defeat of France in 1870.
[11] Indian Almond *Terminalia catappa*
[12] Double Coconut, *Lodoicea maldivica*, tall fan-palm endemic to Seychelles.
[13] there are a number of puzzles in this story. *Bois blanc* is *Hernandia nymphaeifolia*, a tree with 'mediocre' wood (Rouillard & Guého 1999) not normally used in construction, so making planks is odd. Odder still of course is the black arrowhead, and if the story is to be believed then this would have been an extremely important piece of archaeo-history, as recent research (e.g. Anderson 2018) has detected no evidence of pre-European visits to the granitic Seychelles.

Anderson A, Camens A, Clark G & Haberle S. 2018. Investigating pre-modern colonization of the Indian Ocean: the remote islands enigma. pp 30–67 in K. Seetah ed. *Connecting Continents*: *archaeology and history in the Indian Ocean*, Athens, Ohio: Ohio University Press. 428pp.

Rouillard, Guy & Guého, Joseph. n.d.[c1999]. *Les plantes et leur histoire à l'Ile Maurice.* Mauritius: [authors]. 752pp.

[14] now *Chelonia mydas* & *Eretmochelys imbricata* respectively
[15] day-geckos *Phelsuma* spp.
[16] generally now known as mudskippers; *P. sobrinus* also occurs - both are *kabo soter* in creole
[17] rose-apple *Syzygium jambos*
[18] Gray's leaf insect, *Phyllium (Pulchriphyllium) bioculatum*
[19] Pike's description sounds like the termite *Nasutitermes maheensis* but the biting is more like one of the small black ant species
[20] *Archaius* (ex-*Calumna*) *tigris*, endemic
[21] sweet potatoes *Ipomoea batatas*
[22] Fairy Tern, now *Gygis alba*
[23] White-tailed Tropic-bird, now *Phaethon lepturus*
[24] species of squid
[25] *Thunnus alalunga* also called Longfin Tuna
[26] While there may have been Common Noddies *A. stolidus* present, the description of birds laying on sand without a nest fits Sooty Terns *Sterna fuscata*, the species whose eggs are most commonly harvested in the Seychelles.
[27] although 'cowfish' is normally used for the Bottlenose Dolphin *Tursiops truncatus*, the animals Pike described appear to have been Spinner Dolphins *Stenella longirostris*.
[28] the animal Pike described is the harmless but fearsome-looking whip-scorpion *Tarantula* (ex-*Thrynictus*) *scaber*, apparently confused by the locals with the mildly venomous giant crab spider *Heteropoda venatoria.*
[29] The larger species was *Chiromachus ochropus*, the smaller, more painful one, *Isometrus maculatus*
[30] probably the Seychelles Wolf Snake *Lycognathophis seychellensis.*
[31] bronze gecko *Ailuronyx* sp., probably *A. seychellensis*.
[32] Seychelles Magpie-robin.
[33] a species of sea snail, a marine opisthobranch gastropod.
[34] this is the breadnut, *rima* in creole, a seeded variety of the breadfruit *Artocarpus altilis*.
[35] now *Utetheisa elata*
[36] now *Melanitis leda*, Evening Brown.
[37] now *Euploea mitra*, King of Seychelles
[38] *Trachylepis* (ex-*Mabuya*) *sechellensis*, Seychelles Skink.
[39] Seychelles Stick Insect *Carausius sechellensis*.
[40] *Delta allauaudi*, also called Potter Wasp, *mous masonn* in creole.
[41] *Achrostichum aureum* and *Lindsaea kirkii*
[42] The name used at the time for the palm *Phoenicophorium borsigianum*
[43] in the mid-19th century the only rat in the Seychelles was the Black or Ship Rat *Rattus rattus*.
[44] Now *Syzygium aromaticum*
[45] Pike used '*Iulus*' (now usually *Julus*) as a general term for millipedes; this one may be *Spirostreptus sorornus*

[46] Rhinoceros Beetle *Oryctes monoceros;* the larva feeds in debris around the trees, and may be the grub referred to by Pike.
[47] Seychelles Sunbird, correctly *Nectarinia dussumieri*.
[48] now *Lodoicea maldivica*
[49] given the size, it seems that Pike had in fact disturbed one of the endemic caecilians; *Hypogeophis rostratus* is the only one reaching the length (14") mentioned by Pike.
[50] the '*Helix'* is now *Stylodonta studeriana;* the '*Cyclostoma'* is now called *Tropidpohora pulchrum*.
[51] Seychelles Blue Pigeon, now *Alectroenas pulcherrima*.
[52]Seychelles Parakeet, now *Psittacula wardi*, extinct.
[53] Seychelles Black Parrot.
[54] Seychelles Black Bulbul.
[55] Death's Head Hawkmoth, now *Acherontia atropos*.
[56] large day gecko *Phelsuma sundbergi*
[57] Cardinal Soldierfish, now *Plectrypops lima*
[58] Pike now identifies the snake, as we suspected at endnote 16, as (current name) *Lycognathophis seychellensis*
[59] a freshwater terrapin; the two species in the Seychelles are *Pelusios castanoides* and *P. subniger*
[60] Seychelles Paradise Flycatcher, now *Terpsiphone corvina*; Pike muddled the sexes – the male is black and the female chestnut and white with a black head.
[61] Seychelles Fody
[62] initials indicating masonic ranks and orders identified from Hannah, W. 1952. *Darkness visible – a revelation and interpretation of Freemasonry*. London: Augustine Press. 228pp. 'SPRS' is the 32nd of 33 degrees – Pike was thus quite a senior freemason.
[63] *vacoa* is the vernacular for screwpines *Pandanus* spp., in this case probably, from the description of the stilt roots, the endemic *P. sechellarum*, though there are several other species including also one, *P.(Martellidendron) hornei*, named after John Horne.
[64] Pike failed to mention these last two are respectively a snail, now *Pachnodus velutinus,* and a giant millipede, now *Sechelleptus seychellarum. Spirostreputs obtusus* is a giant millipede from the Congo, so presumably he is referring to a giant millipede, the only Seychelles species is *Sechelleptus seychellarum*, although this has not otherwise been recorded from Mahé, so this is an interesting record.
[65] snails: *Helix unidentata* now *Stylodonta unidentata*, 'Helix resembling the *Similaris'* is *Bradybaena similaris*, 'silvery looking *Pupa*' is unidentifiable, 'striped and plain *Bulimus fulvicans*' are varieties of *Pachnodus kantilali*, *Helix insularis* is a variety of *S. unidentata*.
[66] Seychelles Flying-fox, now *Pteropus seychellensis.*
[67] This mystery bird will be the subject of a separate note – Anthony Cheke
[68] feral pig *Sus scrofa*.
[69] the brash of leaves and crushed cane left once the sugar has been extracted.